Time for a change? The process of lengthening booking intervals in general practice

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SUMMARY

Longer booking intervals between appointments in general practice are generally seen as 'a good thing', and have a strong 'evidence base' to support them. Changing to longer booking intervals is regarded as a pipe dream by many general practitioners (GPs). This paper reports the process and outcomes of a change to longer booking intervals in one practice, identifies the key elements of the change, and examines lessons learned for the practice, to help other practices to do similarly. The most important factor in bringing about change was the influence of facilitation by outside parties; first, by management consultants who identified solutions to the practice's problems, and secondly, by recruitment to a research study. Other outside influences were an awareness of the success of other practices in changing to 10-minute booking intervals, and the increasing 'evidence base' to support such change. Internal influences on the process were a desire to change as a result a perception that the practice was under-performing, and the stress associated with this. As a result of the change, the number of doctor consultations fell and the number of nurse consultations rose, fewer patients reconsulted, and marginal improvements were reported on doctor and patient satisfaction. Other practices may benefit from such change; the use of management consultants as facilitators may instigate such change.

Keywords: appointment systems; practice management; consultations.

Introduction

CHANGE is inevitable in general practice. Many GPs aspire to institute organizational change in their practices, often as a result of peer pressure from within the profession. While some practices succeed, many do not, and for a variety of reasons including:

- differences of opinion within the practice,
- a 'practice dynamic' that does not facilitate change,
- a reluctance to change established ways of working,
- change being perceived as a threat,
- an uncertainty that change advocated by others outside of the practice is not implementable or relevant to their own practice, and
- lack of sufficient 'slack' in the system to cope with the change.[1]

The setting

The practice is centred around a Yorkshire market town, and works from modern purpose-built premises and three dispensing branch surgeries. The population served covers a mixed urban/rural area, and the list size is stable at 14 500 patients, whose demographic nature is in line with national figures for age, sex, and social class. There are six partners, one part-time assistant, and one retainee. The practice is fully computerized and records all consultations made with all practice staff and at all locations.

The 'problem'

Until 1990, the practice booked appointments at five-minute intervals. Three partners found this unsatisfactory, with the main source of dissatisfaction being the pressure of dealing with problems adequately in limited time, with the consequence of running late. These partners believed that too many patients were reconsulting within a short space of time, perhaps unnecessarily. In 1990, the practice changed to 7.5 minute booking intervals for those doctors who so wished. This improved the situation, but the improvement was difficult to quantify, and there was subsequently a general reluctance to make further changes without justification, despite a rapidly increasing 'evidence-base' that favoured longer booking intervals.

The practice debated the seemingly logical argument that others will recognize: seeing patients at shorter intervals ensures that more appointments are available. The argument for a greater availability of quicker consultations can therefore be persuasive; and the idea of changing to longer booking intervals may seem implausible, with the prospect of longer waiting times for routine appointments and more 'extras' needing to be seen each day.

The evidence

Over the past 10 years, the advantages of longer booking intervals to both patients and doctors have been confirmed (Box 1).[2-8] The practice had difficulty in applying the 'theory' to everyday practice, despite two papers describing practical implications of moving to longer appointments.[9,10] These, however, did not directly help to instigate the process of change.

The aim

The aim of this paper was to help GPs identify key themes that they may use in their own practices to help instigate change. This was done by reporting the process and outcome of the change to 10-minute booking intervals, identifying the key elements that facilitated the change, examining the lessons learned through the process, and exploring the role of the evidence base in this process.

Change

How the change was stimulated

In 1993, the practice approached researchers at the Department of General Practice, University of Edinburgh, known for their work on appointment length. At that time, the department was running an action research project studying the management of change. The researchers calculated the target number of appointments needed per week, based upon a two-week analysis of the number of appointments filled, free or released, at the beginning of each surgery; the number of 'did not attends'; and the number

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Seventy-two per cent of GPs responding to a postal questionnaire would have liked to have offered longer consultations, and most thought that longer consultations would result in a higher standard of care and a lower prescription rate.[2]

In consultations booked at five-minute, compared with 10-minute, intervals, doctors identified fewer problems and recorded blood pressure fewer times, and patients were less satisfied.[3]

In those consultations booked at 10-minute intervals, doctors spent more time discussing clinical problems and management, and health education and prevention.[4]

More psychosocial issues were dealt with in longer consultations and fewer antibiotics were prescribed.[5]

Long (>10 minutes) versus short (<5 minutes) consultations were associated with the doctor dealing with more relevant and recognized psychosocial problems, with more relevant long term health problems, and carrying out more health promotion in the consultation. The ratio of long to short consultation length is suggested as a proxy for quality.[6,7]

Lower levels of stress in doctors is demonstrated with 10-minute booking intervals.[7]

Longer booking intervals removed much of the stress in doctors with more patient-centred styles of consulting (and therefore allowed them to spend longer with the patient).[8]

Box 1. The evidence favouring longer booking intervals.

of extras seen. This was compared with a 'target' number of appointments calculated as 3.5 consultations per patient per year plus 20%.[8] Following this, the lead researchers met the partners and encouraged them to try a change to 10-minute booking intervals.

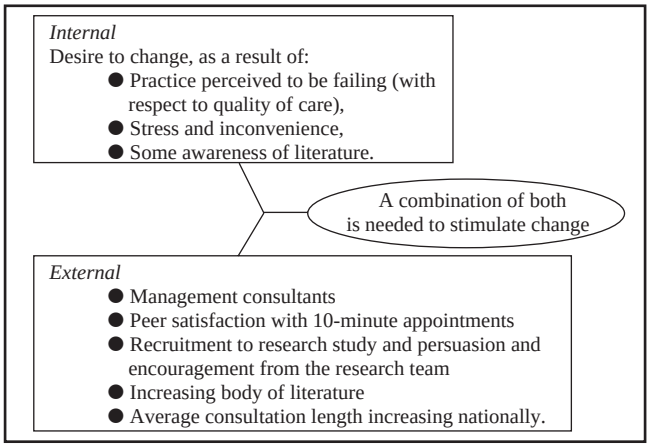
Shortly after this, and as a way of developing an action plan for further development of the practice, the partners spent a weekend 'away', using a team of management consultants as facilitators; this involved one-to-one interviews between the management consultants and doctors/nurses, and group discussions.

Both the Edinburgh research team and the management consultants reached two conclusions relating to workload and booking intervals: first, that too many appointments were being offered and that patients were being seen too frequently (mean consulting rate was 4.5 per patient per year, compared with a national average of 3.8[11]); and secondly, that the practice nurses were being under-utilized.

The actual change

With two objective analyses of the practice coming to similar conclusions, the process of change had begun. Despite reservations from some of the GPs, the practice changed to 10-minute booking intervals in August 1994. The factors leading to the change may be categorized as being 'internal' or 'external' (Box 2); their relative importance is discussed later. Certain other organizational alterations were necessary to make the change work:

- Doctors were encouraged not to review patients automatically, but give patients the responsibility to return.
- Doctors were encouraged to delegate the care of chronic illness to the nursing staff.
- The nursing staff accepted more responsibility for hormone replacement therapy, family planning, and cervical smears.
- Patients requiring phlebotomy were directed to two dedicated clinics per week.
- Reception staff were encouraged to divert patients from doctors to nursing staff, using written guidelines.



Box 2. The influences stimulating the change to 10-minute booking intervals.

- 'Extras' (those expressing a need to see a doctor on that day) were made the responsibility of one doctor, and were seen in the last hour of morning and evening surgeries.

Did the change make a difference?

Data from Edinburgh

The practice took part in a survey of workload and patient flow during two weeks in June 1993 and in October 1994. Consecutive attenders were asked to complete questionnaires adopted from those used in similar work.[7-9] They included measures of doctor and patient satisfaction and various parameters of satisfaction, including the ability to cope with and understand their illness, and reassurance about their health. Chi-squared tests were performed to compare the two groups. The responses of the two samples of patients are summarized in Table 1.

The results from the 1993 survey are similar to those from 1994; possibly as a result of the 1994 data being collected only three months after the change to longer booking intervals. Responses to two questions showed significant differences between the samples. The differences were that, after the change, it was less difficult for patients to get an appointment on a particular day and that patients were better able to cope with illness.

Despite fewer consultations being available after the change, fewer patients reported difficulty with making an appointment at the time that they wanted. One explanation of this may be that the demand for consultations dropped as a result of the change. Longer appointments may have resulted in more time spent with patients helping them to cope with their illness. Patients did report more difficulty in making an appointment with the doctor of their choice.

After the change, more patients felt that the consultation was very worthwhile, and were either satisfied or very satisfied with the consultation and felt more able to cope with and understand their illness as a result. More patients felt reassured about what to do, but fewer felt reassured about their health in general. Why this should be so is unclear; perhaps the extra time in the consultation raised more health issues leading to greater anxiety.

Numbers of doctor and nurse consultations

The total numbers of doctor and nurse consultations for the calendar years 1993–1996 are shown in Figure 1. This demonstrates that, following the change, the overall number of appointments shows a downward trend, and that a greater proportion of these were with nurses rather than doctors. The ratio of doctor to nurse

Table 1. Data from the patient questionnaires.

	1993 sample n = 1262 (before the change)		1994 sample n = 1672 (after the change)		P-value
1. Did you have any difficulty getting an appointment:	number (%) answering 'yes' rather than 'no'				
on the day that you wanted?	222	(17.6)	237	(14.2)	0.017
at the time that you wanted?	156	(12.4)	199	(11.9)	0.706
with the doctor that you wanted?	235	(18.6)	336	(20.1)	0.318
2. Did you feel that your journey to see the doctor today was worthwhile?	number (%) answering 'very' as opposed to 'quite' or 'not at all' 1073	(85.0)	1443	(86.3)	0.326
3. Would you have liked:	number (%) answering 'yes' rather than 'no'				
more time with the doctor today?	42	(3.3)	54	(3.2)	0.882
more advice from the doctor today?	69	(5.5)	72	(4.3)	0.145
better advice from the doctor today?	38	(3.0)	52	(3.1)	0.878
4. As a result of your visit to the doctor today, do you feel you are:	number (%) answering 'much better' or better rather than 'same' or 'less'				
able to cope with your illness?	981	(77.7)	1401	(83.8)	<0.001
able to understand your illness?	967	(76.6)	1306	(78.1)	0.340
reassured about what to do?	964	(76.4)	1281	(76.6)	0.885
reassured about your health?	931	(73.8)	1182	(70.7)	0.066
5. Overall, how satisfied were you with your visit to the doctor today?	number (%) answering 'very satisfied' or 'satisfied' rather than '50/50', 'dissatisfied' or 'very dissatisfied' 1209	(95.8)	1610	(96.3)	0.497

consultations fell from 3.4 in 1994 to 3.1 in 1995 and 2.7 in 1996.

The reconsultation index

A measure of the frequency of reconsultation was devised: the 'reconsultation index'. The consultation data were analysed quarterly to calculate, for each doctor, the numbers of consultations and the number of different patients seen. The index reflects the numbers of different patients seen as a function of the total consultations:

$$\text{Reconsultation index} = \frac{\text{total number of consultations}}{\text{number of different patients seen}}$$

The hypothesis is that seeing a patient for longer will result in dealing with the patient more thoroughly; their likelihood of returning to the doctor in the period following a consultation will be reduced, and this can be demonstrated by a fall in the reconsultation index. Figures for three-month periods from 1994 to 1996 are shown in Figure 2. These demonstrate an initial rise followed by a gradual fall in the index, and that the figures took some time to fall after the change, suggesting that doctors, staff, and patients need time to adapt, and that it is important not to judge outcomes too quickly. Each of the doctors had similarly shaped graphs.

We have found the reconsultation index to be of value in terms of feedback to doctors of their patients' behaviour. However, many factors affect how frequently a patient reconsults, and the index does not separate reconsulting for new or established illnesses. The index enabled this practice to have a direct measure of the outcome of the change, and may have other applications measuring doctor and patient behaviour.

General feelings within the practice

While no formal qualitative data were sought, strong feelings and beliefs within the practice conveyed a real sense of the effects of the change to longer booking intervals. These beliefs were held by all partners, including those who were initially sceptical:

- The practice 'wouldn't ever dream' of going back to the previous system.
- The quality of clinical note-keeping improved.
- All of the doctors felt less stressed.
- The overall quality of care provided to patients had increased.

We believe that these qualitative data convey some of the real benefits of the change, and were of importance to the practice in terms of continuing with 10-minute intervals after the initial change.

Discussion

This paper reports the experience of one practice fortunate enough to have a highly motivated practice team, in addition to a substantial investment of time from an academic department. We believe that this experience may be generalizable because this practice is in no way out of the ordinary.

The clearest message was that a combination of external and internal influences was essential for the change to be initiated. Of these, the external facilitation provided by the management consultants and the enrolment into the research study were the most influential, presumably because the facilitation took place without knowledge of previous practice 'baggage' that could have clouded the issue, was neutral, and provided clear insight from an outside viewpoint.

At the time of change, the practice, in common with most practices, was unaware of any literature on change theory. However, the experience of the practice fits the 'organic process change model' as described by Turrill.[12] This process begins with an 'innovation' (the academic evidence base and knowledge of other practices successfully changing to 10-minute booking intervals), and then moves through the stages of 'ice-breaking', whereby an event (the two external analyses) 'unfreezes' the cur-

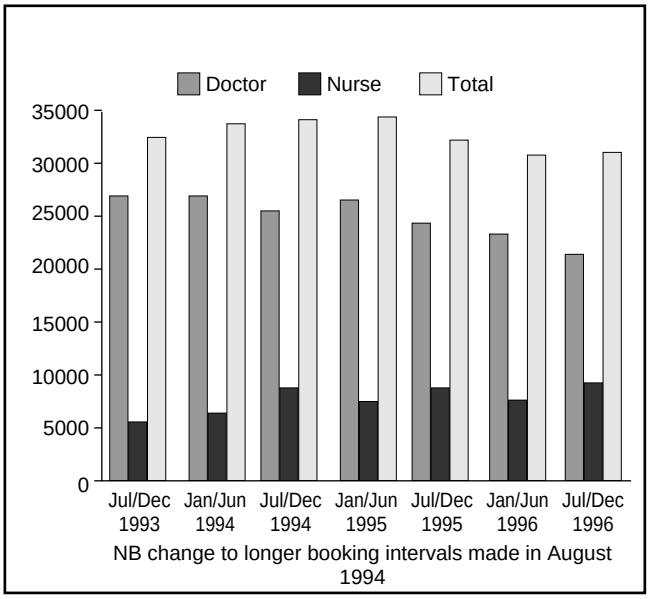


Figure 1. Numbers of doctor and nurse consultations per year.

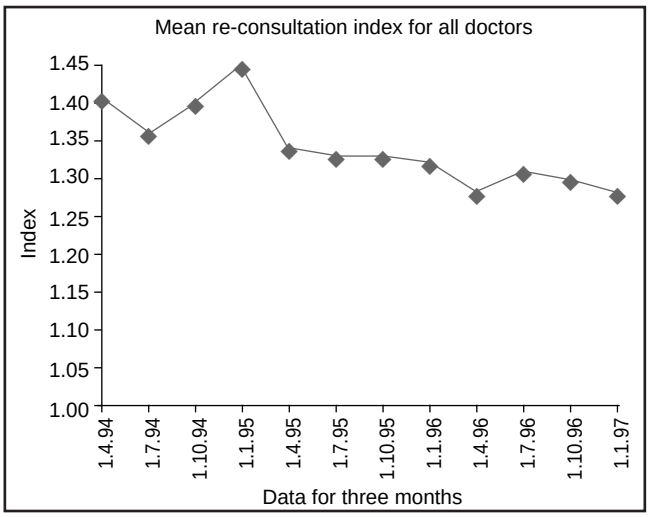


Figure 2. The re-consultation index.

rent situation permitting change, and 'leadership, vision, and strategy' (the internal influences). Potential instigators of change in other practices may take heed of this — it may be possible for external factors to occur (whether by luck or judgement) in order to instigate change; to do this, it may be necessary to wait for the right opportunity to arise.

The place that the evidence base has in the process of implementing change has been highlighted; although, by itself, the internal pressure for change, which increased within the practice as the body of evidence built up, would not have led to change. The benefits that the change to longer booking intervals brought about, as demonstrated by the satisfaction questionnaires, were in keeping with, and could have been predicted by, the academic literature,[2-8] although we are aware of the limitations of our data. Measures of satisfaction have now been added to by the concept of enablement: patients may feel more empowered and helped by longer consultations when their needs are more complex.[13]

What has been most noticeable in the practice over the past three years is the general happiness of the doctors with themselves and with the way that they work, in addition to feeling comfortable with the way in which the change process occurred. These benefits have been mirrored by a perception, backed by data from the practice, that the patients are getting a better service as a result. In this way, therefore, the experience of this practice confirms the advantages of longer booking intervals for both patients and doctors, and that they are an achievable goal. External facilitation by, for example, management consultants, may be the key to unlock the process to begin to bring about such change in other practices.

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