Advanced access: more than just GP waiting times?
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**Background.** Advanced access has been forwarded as a strategy for reducing waiting times in primary care; however, previous evaluations have raised important issues regarding its appropriateness.

**Objectives.** The objectives of this paper are to assess the impact of advanced access on patient access to primary care services, and its broader effects on stakeholders.

**Methods.** A quantitative analysis of appointment data on 462 practices implementing advanced access, together with qualitative analysis of open survey responses and interviews with 28 practice staff. Appointment data recorded time to third available appointment for GP and practice nurse, together with the percentage of patients seen on their day of choice. Themes were identified from the interviews and survey responses and related to issues identified in previous research.

**Results.** The implementation of advanced access was associated with reductions in time to see practice nurses as well as GPs, and increases in the proportion of patients being seen on their day of choice. Interviewee and survey responses suggested that practice population characteristics may impact on the model, and some patient groups may be disadvantaged from the changes in the appointment systems seen in this study. Whilst experiences were mixed, the potential for broader changes to working practices of all practice staff was evident.

**Conclusions.** In general, these results suggest that advanced access can have a positive impact across several aspects of primary care services, and not just the availability of GP appointments. However, it also highlights some problems, in that waiting times worsened in some practices and there were concerns that some vulnerable groups may be disadvantaged.

**Keywords.** Continuity of patient care, family practice, health services accessibility, models, organizational.

**Introduction**

In the United States and UK, waiting times within primary care are seen as an important problem, and consequently, an important measure of service quality. Many interventions have been developed in an attempt to reduce GP workload, and in turn, reduce waiting times.1 One such initiative is the ‘advanced access’ model which purports to adopt systems management techniques to reduce waiting times without the need for increased resources.2 As implemented in the United States, this model is commonly recognised by its approach of offering patients same day appointments.3,4 Despite the increasing use of advanced access, only a few evaluations are available and they have tended to use small sample case studies.3–6 Beyond the immediate impact on GP waiting time, several questions have been raised regarding its suitability for all patient groups, whether it affects workload, and whether it is sustainable.5

Within the UK, the advanced access model has been adopted as part of a wide ranging primary care collaboration.7,8 An evaluation of 462 practices within this collaboration found reductions in GP waiting times, but did not focus on the wider potential impact of advanced access.9 This paper looks beyond GP waiting time data, by incorporating analyses of practice nurse appointment data and the proportion of patients seen on their day of choice. Further views as to any broader effects of advanced access are identified from interviews with stakeholders and a GP survey.
Methods

Quantitative study of access data
Practices implemented advanced access in three waves: wave 1 \((n = 107)\) in June 2000; wave 2 \((n = 113)\) in November 2000, and wave 3 \((n = 132)\) in April 2001. Access data were collated by the National Primary Care Development Team, and obtained from all practices from initiation of advanced access up to November 2001. Changes in access after joining the primary care collaboration were estimated by calculating changes in the baseline access data and the mean of the previous 3 months. Three measures of access to primary care services were used: time to third appointment (TTTA) with a GP; TTTA with a nurse; and percentage of patients seen on day of choice. The choice of TTTA as the measure of access is common to other evaluations of advanced access, and is justified on the basis that taking the 1st or 2nd available appointment is highly subject to random effect.

Previous work has focussed on the impact of advanced access on GP waiting times.\(^3\)-\(^6\),\(^9\) Here we consider trends across the three measures of access over time, together with their Pearson correlation coefficients to test for any association between them.

Qualitative study of stakeholders’ views
Stakeholders’ views were gathered from interviews with practice staff and through open responses from a GP survey. Although these data have been obtained from two separate approaches, there were clear parallels in their responses, and consequently, their findings are reported together.

Two sets of interviews were undertaken. The first was undertaken to understand the views of practice staff towards advanced access. Face-to-face semi-structured interviews were undertaken by two members of the research team (FS and MP) with a variety of staff in five practices. The practices were selected purposefully to include practices with large, small, and no improvements in their access data. Attempts were made to interview one GP, one practice manager, and at least one other type of staff such as nurses or receptionists in each practice. Interviews were undertaken at the practices. The interview schedule examined general experiences of implementing the advanced access programme. The second set of interviews was undertaken via telephone on a sample of project managers who were employed to assist practices participating in advanced access. They were sampled purposively to include practices that had costs associated with advanced access that were high, moderate or low, as indicated by a previous survey. These interviews used a separate semi-structured interview schedule aimed primarily at examining views on the costs and sustainability of advanced access.

Across the two sets of interviews, staff associated with 14 separate practices were included. Practices were selected purposefully to reflect a broad range of characteristics and success in reducing TTTA for GPs. Practices came from all four waves of the scheme, with the majority (10/14) from the first two waves. The majority were urban/inner city (12/14) and received deprivation payments (12/14). Five practices said that they had implemented ‘all or most’ of advanced access, nine had implemented ‘some’ and none had implemented ‘little or none’. Baseline TTTA for a GP ranged from zero to 15 days, and changes ranged from +0.67 days to −12.33.

All interviews were taped and lasted between 15 minutes and an hour. FS and SD listened to these tapes several times and made extensive notes based on the recordings. They read and reread these notes to identify emerging themes. These themes were discussed within the research team to ensure that FS and SD were engaging with all the data and that the themes were grounded in the data. The thematic framework was then applied to each set of interview notes to identify which of the interviewees had discussed each theme.\(^10\) This process was similar to the first stages of the framework approach, that is familiarisation with the data, identification of themes and coding of all data.\(^11\) The framework approach allows the researcher to engage with themes of a priori interest and themes emerging from the data. A priori themes included views on which components had been most and least successful, the determinants of success and costs and the sustainability of any changes. Emerging themes were specific issues which interviewees discussed in relation to these more general a priori themes, and these are reported below.

The aim of the GP survey was to identify what GPs considered to be the most and least successful interventions undertaken to improve access in their practice, together with their reasons for, and experience of, joining the collaboration. A postal questionnaire was designed based on the early interviews with GPs, and a mixture of open and closed questions were used. The questionnaire was sent to the lead GP in each of the 462 practices, with a reminder after 2 weeks. The response rate was 80% (371/462).

Research Ethics Committee approval was not necessary as individual patient data were not used in the study. The research also preceded current requirements of ethical approval for research including NHS staff, and research governance approval from a sponsoring organisation.

Results

Quantitative study of access data
The average time to third available appointment with a GP fell by almost 60%, from 3.6 to 1.5 days (Fig. 1). Improvements were also seen in time to third available
appointment with a nurse (Fig. 2), and percentage of patients seen on their day of choice (Fig. 3). Figures 1–3 show improvements in waiting times that appear to continue beyond 16 months. Whilst the majority of practices saw TTTA with a GP fall (190/286), 16% (46/286) saw no change, and 18% (50/286) had an increase.

Improvement in GP waiting time was positively correlated with both improvement in practice nurse waiting time and increase in patients seen on day of
choice \( (r = +0.277 \text{ and } r = +0.234, \text{ both } P < 0.001) \).
Improvement in practice nurse waiting time was positively correlated with increase in the percentage of patients seen on day of choice \( (r = +0.117, \ P = 0.04) \).

**Qualitative study of stakeholders’ views**

*Impact of practice population*

The interviewees discussed the problems of implementing advanced access in deprived areas, but interestingly, staff in practices in affluent areas felt that they too faced particular problems. Some stakeholders found socio-demographic factors to be irrelevant.

“A low socio-economic area … there’s a high demand simply because they … don’t know what the doctor is for and they don’t understand what that service should be offering, and when the right time is to, or to not go, to the doctors—they automatically just go whatever the problem” [Project manager 2]

“[more affluent areas] … are more clinically aware of their rights. So what they will say is if they can’t get a pre-bookable appointment ‘Well I’ll just phone up the out-of-hours service and I’ll get a GP to come and visit me’ because they know that will be more expensive and the GP will then say ‘Alright I’ll come and visit you’ or ‘Yes you can come in …’” [Project manager 9]

*Impact on patient groups*

Some practices attempted to use new appointment systems whereby appointments could only be booked on the day of the appointment. This had the effect of reducing waiting times to zero days on paper, but caused serious concern among some practice staff who felt it did not necessarily improve access to health care for all patients.

“The younger age group, particularly mothers of young children, like it, they know they can be seen”. [GP 2]

“Book on the day appointments in the week were unsuccessful. We tried it for 5 months, but this system discriminated against the elderly in a practice that tries to maintain personal lists as far as possible. The young and articulate loved it, but the elderly found it stressful not being able to keep hitting [the] Redial button from 8.30 onwards” [GP survey]

There were also concerns that the new approach did not suit those with more chronic conditions who wished to have continuity of care, as opposed to immediate care from any doctor.

“You might end up seeing patients not familiar to yourself, with long-standing problems, which perhaps is not as efficient, you have to wade through notes” … [GP 2]

“Patients can usually access an appointment very quickly but we can’t always guarantee an appointment with a particular GP, which is sometimes an issue with patients.” [Practice manager 1]

*Impact on practice staff*

In the practice-based interviews, we asked whether the changes made as part of the collaborative had any other effects on the practices, such as staff satisfaction
or workload. At one practice, where the most radical changes had taken place, there seemed to be a widespread increase in job satisfaction. Staff felt that improvements in access had led to a decrease in hostility from patients, a more challenging role for nurses and receptionists and less pressure on all members of staff. However, at another practice where telephone consultations took place, staff expressed concern about an increased workload and verbal abuse from patients who could not get through on the telephone. Thus views varied by practice.

“The other thing is that there is a complete change in working environment, there is much less stress in the system. [...] my on-call day has gone from being the most hated day of the week to my favourite day because I now have time to do things, and with a smile on my face”. [GP 1]

“Doctors are doing more of their own work, but accept that it is more efficient”. [Practice manager 2]

“It’s made my job easier if anything. There’s less aggro from the patients because they don’t have to wait as long”. [Receptionist 1]

“They [reception staff] are the ones who take the aggro and people who phone up and can’t get through sometimes come down to surgery instead, demanding to be seen as they couldn’t get through on the phone.” [Receptionist 2]

Impact on practice working culture

In interviews, several project managers felt that improvements in waiting times were sustainable and observed more fundamental changes in the way that practices planned future service developments. Practices were seen as being more analytical about planning, using the collaborative’s techniques to understand the problems faced, and inform the decisions made. These changes were seen by many as permanent, with benefits anticipated well into the future.

“They will be able to respond to [...] [future increased demand] [...] better, it will be less of we ‘Oh panic quick, we need more GP time’ it will be a case of okay, we’ve got this increased demand, if it is going to continue how are we going to tackle it, can we cope with it?” [Project manager 2]

“The practices that have been involved have got used to thinking about improving services” [Project manager 6]

“They’ve recognised the issues around capacity and demand and taken stock of the business and thought in the longer term we probably do need another half-time or full time partner or whatever” [Project manager 8]

The need for additional resources to maintain service improvements was highlighted by some interviewees.

“We managed to employ a phlebotomist [...]. Without additional staff these initiatives are very difficult to sustain. Resources, mainly in staff, able to collect and analyse data to target areas for improvement in practices is main area of need. We can’t work ‘smarter’ forever!” [GP survey]

Discussion

Previous research looking at advanced access has focussed on its impact on GP waiting times or GP TTTA. Whilst questions have been raised about possible knock-on effects, such as the impact on continuity of care, these too have tended to focus on GP appointments. This study uses data on 462 primary care practices to assess the wider impact of advanced access across primary care services.

The implementation of advanced access was associated with reductions in mean TTTA for nurses, together with small improvements in the percentage of patients getting their appointment on the day of choice, as well as TTTA with GPs. This shows that the approach is broader than just trying to reduce GP availability as other aspects of primary care services also appear to have improved. However, it was also the case that some practices saw deteriorations in TTTA for GP and nurse services.

All improvements were positively correlated, indicating that on average, practices were able to improve across all three measures of access simultaneously. This is important as it is feasible that improvements in one measure could result in deteriorations in the others. The effectiveness of advanced access is also shown by previous analysis of the appointment data that showed that those practices that implemented more of the advanced access principles achieved greater reductions in TTTA for a GP.

Stakeholder interviews and GP survey results indicate that some practice populations may find advanced access more difficult to cope with than others. These findings corroborate a previous multivariate analysis of the appointment data which showed that practices that lay within a deprived area produced a reduction in waiting times of 0.44 days less than those in non-deprived areas. The reasons for this pattern of findings are not clear, although qualitative results point to a reluctance among some patients to change their consulting patterns in a way that helps reduce waiting times. This highlights a possible tension between the current low waiting time policy and patient preferences.

Certain patient characteristics were identified as having a positive preference for earlier access, such as young mothers. However, some groups’ care was thought to be threatened by changes in appointment systems (e.g. elderly people with chronic conditions). The potential for a low-waiting time system to impact on continuity of care has been raised previously, and these results indicate that this fear is still present.
The evidence on the stressfulness to health professionals of adopting the approach was mixed. These different experiences are reflected in previous work that indicate that increased workload for GPs can be experienced when working with the advanced access model. In some cases, increased workload has led to considerable antipathy toward advanced access, and an abandonment of the approach. The interviews appeared to show that when advanced access worked well, improvements were felt across all staff groups, which again highlights the need to look beyond just GP services and include all primary care services when evaluating advanced access.

Sustained improvements were thought possible by many practices, although there was evidence that these may be dependent on additional resources. Many practices increased staffing over the period studied, although these changes were not associated with statistically signficant reductions in waiting times. In tandem with this, project managers raised the notion that deep-rooted changes to practice planning had taken place which is likely to improve the prospects of sustainable improvements. However, project managers were not practice employees, but worked for an NHS agency overseeing the implementation of advanced access and other primary care programmes. Consequently, whilst their overview of working patterns is independent of the practice, their roles as advocates for the implementation process may introduce bias.

Whilst offering further evidence about advanced access, this study has some problems. Firstly, it lacks a control group, and so it is possible that the improvements were not specific to practices that had implemented advanced access. However, contemporaneous studies point to no reductions elsewhere. Also, the ‘dose–response’ relationship between degree of implementation and reduction in waiting times strengthens that case that the relationship is causal. Secondly, patient views were not included within the study and we relied on the views of staff about the effect of this new system on patients. Patients value many things from primary care services, such as seeing their own GP, Therefore, a reduction in waiting times may not improve patient satisfaction, if for example, it is associated with a lower chance of seeing the GP of choice. Thirdly, this study, and all others on advanced access, lacked a detailed costing study. Consequently, whilst we are confident that advanced access reduced average waiting times within the study cohorts, we do not know how cost-effective the approach was. Finally, the interview study had some limitations. The tapes were not transcribed verbatim due to limited resources, the interviews with practice staff took place at their practices which may have limited their ability to be critical of the new system, and interviews were not undertaken until data saturation was reached and so we cannot claim to have identified the full range of themes, or views within themes. However, a strength of the interview study was that a clinician (MP) interviewed the GPs and non-clinicians (FS and SD) interviewed other staff which we feel allowed for open discussion.

We would suggest two issues need to be considered in future research on advanced access. Firstly, we need to know what the costs are of delivering advanced access. Even in well resourced systems, changes to service configurations are likely to incur costs. Secondly, and perhaps more fundamentally, we need to know what services patients want and whether the advanced access model is able to deliver them. Low waiting times are only one facet of primary care services that patients value: what are the others, and what are their relative importance? Such questions are best answered by research that directly involves patients.

More generally, qualitative research needs sufficient funding to allow full transcription of interviews, and more comprehensive analysis. The focus of this study was the quantitative component, with the qualitative research taking a supplementary although important role of elaborating on the quantitative findings. This limited the resources available for the qualitative component, although the attention to sampling and systematic analysis important to good quality qualitative research was adhered to within these limitations.

In summary, these results corroborate previous findings, and extend them to show the potential for broader improvements to access and practice working patterns. However, problems with the implementation of the advanced access approach were highlighted with some practices seeing a deterioration in waiting times, and concerns for some vulnerable groups who may have been disadvantaged by the new system.

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