Final Report

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Prepared by:

Chris Salisbury, Jon Banks, Stephen Goodall, Helen Baxter, Alan Montgomery, Catherine Pope, Karen Gerard, Lucy Simons, Val Lattimer, Fiona Sampson, Mark Pickin, Sarah Edwards, Helen Smith, Markella Boudioni

Executive Summary

Introduction

Improving access to services is a central aim of the NHS Plan. In order to achieve this, the government has implemented a number of initiatives. The NHS Plan introduced a target that patients should be offered an appointment within two working days, each Primary Care Trust (PCT) was given funds to employ a primary care access facilitator supported by the National Primary Care Development Team (NPDT) and financial incentives were introduced for practices to improve access through their contracts and through a Directed Enhanced Service (DES) on Access.

The organisational model strongly promoted by the NPDT is that of 'Advanced Access'. This is based on the principle of 'doing today's work today' by ensuring that there is sufficient capacity to meet peoples' demands so that they can be seen on the day of their choice. There are several underlying steps in this approach including understanding demand, shaping the handling of demand by providing alternatives to face-to-face consultations, matching capacity to demand and developing contingency plans (Murray & Tantau, 2000). Practices use rapid 'Plan-Do-Study-Act' cycles to implement these changes (Murray & Berwick, 2003b). By working with a Primary Care Collaborative, the aim is that practices will learn generic quality improvement skills which will enable them to achieve sustainable improvement within any area of patient care.

Many of the first wave of practices working with the Primary Care Collaborative reported marked improvements in the wait for an appointment and patient satisfaction. (However, other commentators have expressed concerns that increasing access in this way may lead to a reduction in personal continuity of care, may increase total demand on general practice, and may not meet the needs of particular groups of patients (Murray, 2000).

Considering the size of the investment in Advanced Access, the radical claims made for its benefits, and the strength with which it is being promoted by PCTs, it is remarkable that very little rigorous evaluation of this model has been undertaken. Advanced Access is arguably one of the most important organisational changes in general practice in recent years, and there is a pressing need for comprehensive evaluation of this initiative.

Aims

To evaluate 'Advanced Access' in general practice, and assess its impact on patients, practice organisation, activity, and staff.

Objectives

To describe the range of strategies that general practices have employed to improve access to care

To determine the impact of Advanced Access on the wait for an appointment, continuity of care, practice workload, and demand on other NHS services.

To explore the perceptions of different groups of patients, including both users and non-users of services, about the accessibility of care and their satisfaction with access to care in relation to different models of organisation.

To explore the trade-offs that patients make between speed of access, continuity of care and other factors when making an appointment in general practice.

To explore the perceptions of general practitioners and receptionists about working with the NPDT and implementing changes to practice arrangements to improve access.

To assess the impact of the above changes in practice organisation on staff job satisfaction and team climate.

Method and results

This research was based on a comparison of 48 general practices, half of which operated Advanced Access appointment systems and half of which did not (designated 'control' practices). These practices were recruited from 12 representative Primary Care Trusts (PCTs). From within these 48 practices, eight (four Advanced Access and four control) were selected for in-depth case study using an ethnographic approach.

The research was comprised of several component studies. These included:

- A survey of all practices in 12 PCTs. Based on this we recruited the 24 Advanced Access and 24 control practices and the 8 case study practices.
- An assessment of appointments available and patients seen, based on appointments records
- An assessment of continuity of care based on patients' records
- Random phone calls to practices to assess ability to make an appointment by telephone
- A questionnaire survey of patients attending the practices
- A postal survey of patients who had not attended the surgery in the previous 12 months
- A discrete choice experiment to explore trade-offs patients make between access and other factors
- A survey of practice staff
- Qualitative case studies in 8 practices
- Interviews with PCT access facilitators

The methods and results for each of these studies are described below, in relation to each of the research objectives.

The range of strategies that general practices have employed to improve access to care

Survey of practices and selection of study sites:

A postal questionnaire survey was conducted amongst all 391 practices in 12 PCTs which were representative of the English population. A response rate of 63% was achieved. The majority of practices had adopted at least some elements of the Advanced Access approach. A wide range of innovative measures was being implemented by practices, whether or not they operated Advanced Access.

Although 67% of practices claimed to operate Advanced Access, fewer than half of these appeared to be following the central principles of this approach. Conversely, many of the practices which did not describe themselves as operating Advanced Access used some of the same ideas. Advanced Access practices embargoed a higher proportion of doctors' appointments until the same day than non-Advanced Access practices, but offered a similar number of appointments in total.

The findings from the practice survey were used to identify and recruit the 24 'Advanced Access' and 24 control practices for the main evaluation, and also to select eight case study practices for more in-depth qualitative research.

Observation of case study practices:

Eight practices (four Advanced Access and four control) were purposefully selected as case studies. Patients and staff in these practices were interviewed and access to care was studied using direct observation.

The defining characteristic of Advanced Access for most practices (both for those which introduced it and the control practices that did not) was that appointments were made on the same day, rather than that patients should be seen when they wished. The staff in both Advanced Access and control practices appeared to assume that demand would exceed supply and so had to be capped, in contrast to the assumption of the Advanced Access model that access was predictable and manageable.

The systems in both types of practice appeared to be designed to control access. In the case of control practices this was achieved by a disincentive - the wait for an appointment. In Advanced Access practices demand was limited by the pressure to telephone the practice early in the day, and by the lack of flexibility in when appointments could be made.

There were important contextual factors which influenced whether and how practices organised their appointment systems. There was a sense that practices designed systems that they felt worked for them. These included factors to do with the local population, the building or the local geography and history.

Receptionists in both Advanced Access and control practices used a variety of strategies to overcome the problems they experienced when unable to offer patients suitable appointments, and it was evident that this was a process of negotiation with patients that allowed receptionists considerable discretion.

Some patients also appeared to use various strategies in order to 'game' systems which did not meet their perceived needs.

Patients expressed different sources of satisfaction and frustration with the appointment systems in Advanced Access and control practices. In Advanced Access practices, patients complained about the inflexibility and apparent illogicality of the system, but appreciated the speed of access. In control practices, patients expressed frustration with the wait for an appointment.

The impact of Advanced Access on the wait for an appointment, continuity of care, practice workload, and demand on other NHS services

Wait for an appointment:

Attempts were made to contact each practice by telephone, posing as a patient wishing to make an appointment, on 11 occasions at monthly intervals and at different times. If the practice was engaged or did not answer, up to five further calls were made at two minute intervals in an attempt to make telephone contact. It was possible to make telephone contact with practices within six phone calls on 97% of these monthly attempts, but the researcher was more likely to be able to contact Advanced Access practices within 6 calls (99% of occasions) than control practices (95% of occasions). There was no difference in the length of time spent telephoning to obtain an appointment (median 3 minutes at both types of practice). On 15% of occasions the researcher was not able to book an appointment, with no difference between Advanced Access and control practices. When appointments were made, Advanced Access practices offered an appointment with any doctor sooner than control practices (median wait 0 days and 1 day respectively). The median wait for the third available appointment was one day and two days respectively. Both types of practice failed to achieve the NHS Plan access target of offering patients a routine appointment with a GP within two working days; Advanced Access practices met this target on 73% of occasions and control practices on 65% of occasions. The median length of wait for a first appointment with a *particular* doctor was the same (two days) in Advanced Access and control practices.

We also addressed the issue of access through a patient survey. Consecutive patients consulting in 47 practices were invited to complete a questionnaire (response rate 84% (10821/12825)). Patients in Advanced Access practices were more likely than those in control practices to be seen on the same day as they contacted the surgery. In Advanced Access practices, 57% of patients reported being seen the same day, and 75% being seen within two days. In control practices 32% of patients were seen the same day and 57% within two days. Overall, patients in Advanced Access practices were seen sooner than those in control practices.

Continuity of care:

Data were collected about 114,675 consultations conducted with 5541 patients in 47 practices. There was no evidence of any difference between Advanced Access and control practices in continuity of care, either for surgery

consultations with GPs or if all type of consultations with doctors or nurses were considered.

Further information about continuity of care came from the qualitative case studies, where continuity of care was a common theme in interviews with both patients and staff. Many patients commentated on the importance to them of an enduring doctor-patient relationship, but for others this was not important at all. Staff highlighted concerns that an excessive emphasis on speed of access could have a detrimental effect on continuity of care. Both patients and staff treated speed of access and continuity of care as values which could be traded off against each other, and the outcome of this tradeoff would depend on the nature and seriousness of the problem.

The discrepancy between the quantitative and qualitative research with regard to continuity of care is considered in the discussion section.

Workload:

Data was collected from practice appointment records about appointments available for booking and attendances with different types of health professional and in different types of consultation. The total number of appointments available and the total number of patients seen increased considerably in both Advanced Access and control practices over the period during which Advanced Access systems were introduced. There was no evidence of difference between the two groups, but wide variability between individual practices. There was no evidence of difference between Advanced Access practices and control practices in the proportion of appointments which were not attended by patients (DNA rates).

Demand on other NHS services:

There was no evidence from the survey of patient consulting of any difference between the two types of practice in patients' use of other NHS services. In a postal survey of people who had *not* consulted recently in general practice there was some evidence that people registered with Advanced Access practices were more likely to have consulted an NHS walk-in centre, an A&E department, a pharmacy or another general practice than those registered with control practices. However the numbers of respondents indicating these consultations were small and confidence intervals for these estimates were very wide so these findings should be interpreted with caution.

The perceptions of different groups of patients, including both users and non-users of services, about the accessibility of care and their satisfaction with access to care

Survey of patients consulting:

In this survey it was notable that most consultations were not for acute problems, with 70% of people having had their problem for at least a few weeks.

The most important factors for patients in making an appointment appeared to be being able to choose to book an appointment on a day of their choice, followed by being able to book as soon as possible, being able to see a doctor rather than a nurse and being able to see a particular doctor. However these preferences varied considerably for different patient groups, such as the elderly, those with chronic illnesses, men and women and those in or out of employment.

Patients in Advanced Access practices were no more likely than those in control practices to say that they had obtained their *current* appointment on the day of their choice or to say they were seen as soon as they wished, and they were less likely to say they had been able to book the appointment in advance. However, when asked about their *usual* experience of making appointments, patients in Advanced Access practices had more positive experiences of how long they had to wait to see any doctor, see a particular doctor and see a doctor urgently than those in control practices. There were no differences between the experiences of patients in Advanced Access or control practices in satisfaction with the receptionists, waiting times in the surgery, getting through on the telephone, speaking to a doctor on the telephone, continuity of care, or satisfaction with the appointment system.

Non-user survey:

A postal survey was conducted to seek the views and experiences of patients in the case study practices who had not had a consultation with a member of their general practice team in the previous 12 months. The response rate was 47% (735/1564). A minority of patients had wanted to make an appointment in general practice but had not been able to, or had not tried to make an appointment because they thought this would be difficult. Patients in Advanced Access practices were more likely than those in control practices to have experienced or anticipated difficulties in contacting the surgery or in getting an appointment at a convenient time. Patients in control practices were more likely to have experienced or anticipated difficulties in getting an appointment within a reasonable length of time.

Trade-offs that patients make between speed of access, continuity of care and other factors when making an appointment in general practice

We conducted a discrete choice experiment (DCE) amongst 1200 patients consulting in the eight case study practices (response rate 94%). The DCE was designed to elicit preferences for key, generic, components (attributes) of general practice appointment systems, quantify trade-offs and predict respondent's choices from a range of alternatives specified. Respondents were presented with making trade-offs between different levels of attributes for two, hypothetical yet realistic health conditions; an acute, low worry and an ongoing, high worry condition. For both conditions the four key components of appointment systems that were of value were, in order of importance, being offered: choice of doctor; a convenient time of day; a doctor rather than a nurse; and an appointment sooner rather than later. In addition, respondents valued duration of the appointment (preferring 20 minute appointments) if the appointment was for an ongoing, high worry condition. It followed that

respondents' were willing to wait an extra 3.5 days (acute, low worry problem) or an extra 5 days (ongoing, high worry problem) for an appointment to see a doctor of their choice; an extra 2.2/2.6 days, respectively, for a convenient time of day for the appointment and an 1.6/1.8 extra days, respectively, for an appointment to see any doctor rather than a nurse.

The perceptions of general practitioners and receptionists about the experience of working with the NPDT and implementing changes to practice arrangements designed to improve access

Qualitative case studies:

Based on interviews and observation conducted within the qualitative case study practices, it appeared that the Primary Care Collaborative and the PCT access facilitators had some influence during the introduction of Advanced Access but their involvement in shaping practice policy was significantly reduced once the new appointment system was up and running. There was only limited evidence of quality improvement approaches such as regular monitoring of supply and demand or the use of PDSA cycles, and little to suggest that the introduction of Advanced Access was associated with learning an approach to quality improvement which would benefit other aspects of practice organisation in the way envisaged by the NPDT.

Interviews with access facilitators:

Six PCT access facilitators were interviewed about their perceptions of helping practices implement Advanced Access. Their reflections tended to reinforce our observations at the case study practices about the confusion between the Advanced Access model, the access targets, and the appropriateness of embargoing appointments. They also experienced difficulties in getting doctors to fully engage with the collaborative process, and felt that practices tended to take some ideas from Advanced Access but failed to embrace the complete model. On the other hand, although these issues were all challenges, the facilitators remained generally enthusiastic about Advanced Access to introduce change.

The impact of Advanced Access on staff job satisfaction and team climate

A survey was conducted amongst the doctors, nurses, receptionists and administrative staff in 46 practices (85% (817/960) response rate). There were few differences between Advanced Access and control practices in the perceptions of stress experienced by any of the groups of staff. Doctors and receptionists expressed more positive team climate scores in Advanced Access practices compared with control practices, whereas nurses reported lower scores. Doctors in Advanced Access practices had slightly greater job satisfaction than those in control practices, with no evidence of difference for nurses or reception/administrative staff.

Strengths, limitations and methodological issues

Strengths: This appears to be the largest study and most comprehensive evaluation of appointment systems in general, and of Advanced Access in particular, to have been conducted in the world. Unlike earlier case study research, it is based on the widespread implementation of Advanced Access in representative general practices, rather than 'early-adopters' of this approach. The use of integrated quantitative and qualitative research studies enabled us to explore the research questions from a range of perspectives and to interpret and explain findings with greater confidence than would have been possible from smaller isolated studies.

Selection of sites for the main evaluation: Although the study was designed to compare practices which operated Advanced Access and control practices, it was clear from the practice survey that practices did not fall neatly into these two groups. Some of the 'Advanced Access' practices may not have been operating Advanced Access in line with the model advocated by the National Primary Care Development Team (NPDT). It is important to recognise that any policy or model of organisation, including Advanced Access, does not exist in the abstract, but has to be implemented in real life, and the way in which the policy is implemented will vary in different contexts. There is a reciprocal relationship between the programme of innovation and the wider setting in which it takes place, and this was an important aspect of this evaluation addressed in the qualitative case studies. In order to maximise the chance of detecting any differences between practices operating or not operating Advanced Access, if such differences existed, practices were selected for this study which were as far as possible at the extremes of implementation (those most clearly seeking to implement Advanced Access and those which clearly were not).

The observational design of the study: Some components of the study (the audits of continuity of care and of practice activity) included data both before and after practices introduced Advanced Access. However other research components were based only on data after practices introduced Advanced Access, so one cannot exclude the possibility that the two groups of practices had different performance at baseline. For this reason, in all analyses we took account of potentially important confounding variables.

Implications of this research for policy

In this study, practices operating Advanced Access were able to offer patients appointments slightly more quickly than control practices, with no evidence of any decrease in continuity of care or difference in the increase in practice workload. Both groups of patients failed to offer access within the NHS Plan targets. Apart from speed of access, other differences between the experience of patients and staff were minor, and Advanced Access was not associated with the dramatic benefits claimed in previous reports or case studies of individual practices. In particular there was little evidence that Advanced

Access was associated with practices learning quality improvement techniques that would have beneficial impacts on other aspects of practice activity.

It was notable that almost all practices characterised Advanced Access in terms of same day care, and all the 'Advanced Access' practices restricted booking of future appointments to a greater or lesser extent. This approach is in stark contrast to the model of Advanced Access promoted by the NPDT, and illustrates the way in which centrally directed policies become modified and diluted when widely implemented. However there was also evidence of diffusion, with many of the control practices having introduced many of the same strategies as the Advanced Access practices (although not necessarily as a result of the Advanced Access initiative).

Comparison of the results of this study with the earlier national surveys of NHS patients suggests that access to care worsened between 1998 and 2002 and has now returned to 1998 levels amongst control practices studied, and is slightly better than this in the Advanced Access practices studied. Interestingly, the component of this study which involved phoning practices to make an appointment suggested that it is easier to contact practices by phone, even early in the day, and to make an appointment than is reported by patients in surveys, although still not meeting the NHS Plan access targets.

Improving access to health care is a top priority for current policy, but the priorities of patients, health professionals and government may not be the same. This study supports earlier research findings that being able to choose to see a particular doctor or to be seen at a convenient time are more important than speed of access for most patients, and also that different groups of patients (for example those who have chronic illness vs. those who are usually healthy, or those in different age groups) have distinctly different priorities. This is not surprising in the light of the finding from the patient survey that 70% of consultations in general practice involved problems that patients had had for several weeks.

This study suggested several possible reasons why the Advanced Access model may not have been implemented by practices in the way envisaged. These include:

- Confusion between the NHS access targets and the Advanced Access model.
- The lack of fit between the assumption of the Advanced Access model that demand is predictable and manageable and the widespread belief amongst health care professionals that demand greatly exceeds supply and is also related to supply.
- The strong influence of local contextual factors, including features of the local population, the values of the practice and limitations of buildings, which determine how appointment systems develop which are felt to work in that particular setting.

Implications for future research

This project raises several priority areas for future research:

• The relationship between the supply and demand for primary health care.

- Whether practices which operate systems more closely aligned with the Advanced Access model as promoted by the NPDT do achieve the scale of benefits described in earlier case study reports when subject to rigorous, independent and controlled evaluation.
- The costs as well as the effects of the Collaborative approach to promoting quality improvement in health care.
- Existing literature about both the means and consequences of promoting innovations in the NHS is extensive but largely conceptual or descriptive. Empirical studies are needed about the benefits of different strategies to encourage general practices to implement change.

Conclusion

All of the aims and objectives set for this project were achieved. The following conclusion summarises the main findings in relation to these objectives.

Most of the practices in 12 representative PCTs in this study claim to have introduced Advanced Access, but the extent to which these practices have actually implemented the principles of this model is limited. Many practices appear to interpret an Advanced Access system as one based on same day access, while paying less attention to the fundamental principles of matching capacity to demand and seeing patients when they wish. Practices of all types have introduced a wide range of strategies in an attempt to improve access to care. Those practices which have implemented Advanced Access offer slightly faster access to care than those which have not, with no evidence of any disadvantages in terms of workload, contacting the practice, continuity of care or demand on other NHS services. Overall, there was no evidence of difference in patient or staff satisfaction with the systems operated by Advanced Access or control practices. The priorities and demands of different groups of patients are very different, and different appointment systems suit some groups better than others.

Disclaimer

This report presents independent research commissioned by the National Institute for Health Research (NIHR). The views and opinions expressed therein are those of the authors and do not necessarily reflect those of the NHS, the NIHR, the SDO programme or the Department of Health

Addendum

This document was published by the National Coordinating Centre for the Service Delivery and Organisation (NCCSDO) research programme, managed by the London School of Hygiene and Tropical Medicine.

The management of the Service Delivery and Organisation (SDO) programme has now transferred to the National Institute for Health Research Evaluations, Trials and Studies Coordinating Centre (NETSCC) based at the University of Southampton. Prior to April 2009, NETSCC had no involvement in the commissioning or production of this document and therefore we may not be able to comment on the background or technical detail of this document. Should you have any queries please contact sdo@southampton.ac.uk