Preface

I would like to thank the National Primary Care Development Team for their help in preparing this booklet. Also, Mark Hunt, John Bibby and Tim Wilson for their scrutiny of the text. Most of all I wish to express my gratitude for the energy and hard work of the practices on the Primary Care Collaborative and those who generously donated their stories, without whose experience this booklet would not be possible.

The origin of the principles on advanced access owes much to the pioneering work of my friend Mark Murray. I have known Mark for a number of years, from when he was a physician in Sacramento, California to his current role as international consultant (Murray, Tantau and Associates, murraytant@email.msn.com). There are only a few individuals in our lives who develop concepts that are globally applicable; Mark is one of those rare and talented people - and a great guy!

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This booklet is intended to provide a guide on how to improve access to primary care for the patients of a practice. To do this, various examples are provided of practical steps that have resulted in improvements. The reaction of most people when there is mention of “doing today’s work today” is “this is impossible, it will open the floodgates”. This is based on the premise that attempting to prioritise demand from patients is the best means of coping with high levels of demand in general practice. In reality, many of the systems that we are used to operating simply deflect demand to another day, perhaps several days away, in order to ‘protect’ today. This then blocks the future ability to deal with demand and has a recurrent knock-on effect on access. It does not reduce demand and paradoxically, is likely to increase it.

Why? Because patients have to build into their thinking the expected wait to see someone. Their threshold is therefore lower - “I will book just in case it worsens”. Secondly, people will game the system. They will access urgent appointments or out-of-hours services to bypass the queue. Staff are placed in potentially adversarial relationships with patients. Patients, staff and clinicians become frustrated. Worst of all, the system may unwittingly restrict access to someone who needs to be seen. Alternatively patients deflect themselves to A and E departments who will probably send them back to the practice.

Releasing the artificial constraints on dealing with patient demand as a means of improving access and easing staff pressures feels like the wrong thing to do. However, demand is predictable according to list size and, contrary to popular thought, is finite. There are now many sites that have moved towards the principle of “doing today’s work today”. Their experience is that:

♦ Patient demand is smoothed and occasionally reduces, particularly for of hours (people maximise self-help in the safe knowledge they can be seen when they want to be seen).
♦ Patient satisfaction increases.
♦ Staff and clinician satisfaction increases.

The elements of this new system (advanced access) that achieves the results are:

♦ Understanding the demand for access to a specific practice
♦ Shaping that demand
♦ Matching the capacity of the practice to meet the demand
♦ Having contingency plans to sustain the system

These components are described in detail over the next few pages, along with examples of practices currently operating various aspects of the system.
Case Study (1)

A six partner practice in a semi-rural area with 11,500 patients. Before the collaborative, the waiting time for a routine appointment was 3-5 days with lots of gaming by patients and staff to fill ‘urgent’ slots. They introduced all the components of advanced access; segmenting demand using the telephone, altering how they handled demand on Mondays, having contingency plans for staff absences and high demand. They can now ‘do today’s work today’. Previously only 60% of patients were being seen when they wished to, now it is 100%. Their DNA rate has dropped from 120/month to 20/month ‘freeing up’ 1000 minutes per month of GP time. Demand has not increased and staff and doctors find their lives easier.

Characteristics of Access Models

Most practices in the UK will operate a traditional system with a number of urgent and non-urgent appointments available, sometimes in combination with a system of open access, where everyone who turns up is seen but has to wait a long time. In the traditional system there are battles between patients and practice staff around what is or is not urgent; patients game the system, receptionists and doctors apply the system differentially for particular patients and the whole scenario can be stressful. This system also usually pays little heed to the variation, which is predictable variation, in daily demand throughout a typical week e.g. everyone knows Mondays are ‘busiest’.

If one day’s demand is put off until another day, there is a magnified effect on the queue that develops for future availability. An analogy might be if a slow moving vehicle moves into and blocks a space in the traffic on a motorway, an enormous queue builds up which can, when the motorway is very busy, result in the vehicles at the back just crawling. We have all been in that situation where there is no apparent reason for the slow down. A traditional appointment system can work in the same way. Consider what a typical week’s booking sheet might look like on a Monday. The numbers below are arbitrary and for illustration only but the pattern is representative.
If the daily demand on a Monday is 175, then 30 people may find themselves, one way or another, in the urgent slots – but there are 145 patients still not catered for. 45 can be slotted into free routine appointments later in the week (10 + 10 + 20 + 5) but that blocks the rest of the week, and even those more fortunate patients will still have to wait 3 – 4 days. The rest (100) are deferred into the free routine appointment slots the week after, blocking that week’s capacity and repeating the pattern for subsequent weeks. This still doesn’t account for those patients who really are urgent and also have to be added in. On Tuesday, Wednesday, Thursday and Friday, the same sequence of events occurs with the demand on each of those days (e.g. 150, 125, 115, 150) deferred to the future.

This deferred demand is what we call backlog, i.e. the number of days where there are no free routine slots for an individual clinician.

Imagine now that you start the week with a blank sheet.

<table>
<thead>
<tr>
<th>Daily Demand</th>
<th>MON</th>
<th>TUES</th>
<th>WED</th>
<th>THURS</th>
<th>FRI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>175</td>
<td>150</td>
<td>125</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Available non-booked appts</th>
<th>(150-25)</th>
<th>(150-25)</th>
<th>125</th>
<th>150</th>
<th>150</th>
</tr>
</thead>
</table>

| Carried over | 25 | 25 | 0 | 0 | 0 |

By Wednesday you would be in a position to do ‘today’s work today’ with no carry over for the subsequent week. The aim of advanced access is to get to that position. Note that the demand, and therefore the workload, is unchanged.

Consider now that you seek to shape that demand by dealing with patients in safe, different ways from face to face consultation. These efforts can dramatically reduce the need for face to face appointments (see later) which releases “hidden capacity” in the system. (Figure 1 illustrates schematically segmenting the demand in various ways.)

The balance can be achieved on each day. Capacity and demand is in equilibrium on a daily basis. The distinction between “urgent” and routine with its rules and regulations and battles, is no longer necessary.

Model for access

Figure 1
Preventing people booking an appointment when they wish to is no longer necessary. This sounds crazy but is true. Why? Because you can be confident that your capacity can meet your daily demand, because you have calculated it from gathering relevant data beforehand.

So what about follow-ups? By definition, these should be treated as part of your daily demand, and therefore part of the mathematical equation. In other words, the calculation of daily demand is:

\[ \text{Daily demand} = \text{same day demand} + \text{follow-ups} + \text{other appointment types}. \]

Daily demand is therefore a request for an appointment received on a specific day whether it is requested for that day or not.

An essential element of moving to advanced access is to understand not simply the totality of daily demand but the profile of that demand. This enables you to determine the proportion of appointment slots that need to be available for ‘same day’ demand, and the proportion of appointment slots that can be booked in advance. Evidence suggests that this proportion will vary for each practice.

Understanding this allows you to ensure that on a busy day for demand (e.g. Mondays) the system is not clogged with follow-ups, but equally that follow-ups are accounted for in the week’s profile of the appointment system. Case study 2 illustrates how one practice did this.

**Case study (2)**

Before starting advanced access, the practice had a high rate of DNAs, with surgeries fully booked 3-4 days ahead. It had insufficient capacity to deal with acute appointments at the beginning and end of the week. Problems around accessing the GP were causing some friction between patients and receptionists. GP telephone consultations were undertaken, 10 minutes in the morning and 30 in the afternoon. The system led to banking of calls, repeat calls and problems with accessing records on time.

Following the first Learning Workshop, two initiatives were undertaken. The first related to the appointments system: daily demand was assessed over three weeks, determining that around 44 appointments were required each week for follow-ups (the number varying on different days). The remaining appointments each week were available appointments. Work was undertaken to remove the backlog. Since then, the third available appointment (the measure used to determine wait time) has consistently been zero, there has been a reduction in DNAs and cancellations, and patients are more satisfied. The number of follow-up appointments needed is reviewed weekly to ensure that a bookable follow-up appointment is always available.
available five working days in advance. The surgery introduced seven 5-minute booked telephone consultations each day, where the GP would telephone the patient. The system was advertised in the practice. Repeat calls and queuing no longer exist, notes are gathered in advance, and staff and patients have received the new system well.

In order to move from the traditional model to advanced access there is a sequence of events.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
<th>Step 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>dissatisfaction with life as you know it</td>
<td>understand demand each day of a typical week</td>
<td>shape the handling of demand</td>
<td>match capacity to demand</td>
<td>put contingency plans in place</td>
</tr>
</tbody>
</table>

What follow in the next few pages are practical tips on how to progress. The most successful sites in improving access carefully understood the need to take account of patient views, and planned their communication with patients about the system changes.

Quite a number of practices work hard to do the sums and effect improvements that change the handling of demand, establish contingency plans and work down the backlog – but remain nervous or unsure about how to handle demand for new appointments for the future (as opposed to follow up). For example, a patient may ring and, because of their personal circumstances, want to book an appointment in advance rather than the same day. Some practices striving for advanced access have overcome this insecurity by imposing new rules on the new system that insist patients ring again on the day they wish to be seen. **However, there is no need to do this.** As mentioned, the calculation of daily demand, which provides the basis for the mathematics (see next section), takes account of all requests for an appointment **whether for that day or not.** The variation in patients wishing to book in advance has already been accounted for, and if you have matched capacity to predicted demand on a daily basis, then this should balance out correctly. The only blocking off of appointments on a given day should be for the profile of follow-ups previously calculated – what we might term “good” backlog. This is different from blocking off the whole day until that day.

The advanced access appointment system would then look like this.

<table>
<thead>
<tr>
<th>Day</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum number of available appointments</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Daily demand with adjusted handling of demand</td>
<td>130</td>
<td>115</td>
<td>80</td>
<td>115</td>
<td>130</td>
</tr>
</tbody>
</table>
You therefore can walk in to a Monday morning knowing the system has the capacity to do today’s work today. Patients aren’t battling with staff and the system works more smoothly for patients, doctors and staff. This is the experience of those who have adopted advanced access (see table 1)

**Case Study (3)**

Among the largest surgeries in the country this 10,000 patient practice in an industrial town, with 11 partners and 2 associates has improved patient access by using a number of techniques. These include freeing up GP time by introducing nurse triage of visit requests and same day consultations, training nurses to run chronic disease management clinics and introducing a Health Visitor surgery for under 5s. A Duty Doctor system has also been introduced so that GPs have undisturbed time in surgery. The practice reports positive results: every patient can be seen the same day requested, empty slots are appearing in surgeries and a senior receptionist remarked that she had experienced the ‘happiest two weeks in the 15 years I’ve worked here’. The third available appointment for GP’s has reduced from 4 days.
Table 1: Characteristics of the various access models
(adapted from Murray)

<table>
<thead>
<tr>
<th>Traditional Access</th>
<th>Open Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Over full appointment schedules</td>
<td>♦ Over full schedules</td>
</tr>
<tr>
<td>♦ Work pushed forward from the past to “protect today”</td>
<td>♦ Attempts to deal with demand on the day</td>
</tr>
<tr>
<td>♦ Urgent/routine appointment types</td>
<td>♦ Capacity gained by working harder/longer</td>
</tr>
<tr>
<td>♦ Potential long waits for routine appointments</td>
<td>♦ Long waits for patients in the surgery</td>
</tr>
<tr>
<td>♦ High DNA rates</td>
<td>♦ Urgent/routine split</td>
</tr>
<tr>
<td>♦ Inequality of access</td>
<td>♦ Patients game the system to be seen as “urgent”</td>
</tr>
<tr>
<td>♦ Patients “game” the system</td>
<td>♦ Little control over workload</td>
</tr>
<tr>
<td>♦ High demand for out of hours services</td>
<td>♦ Considerable noise in the system from patients complaints</td>
</tr>
<tr>
<td>♦ Backlog of routine work</td>
<td>♦ Stressful environment for practice staff</td>
</tr>
<tr>
<td>♦ Considerable “noise” in the system from patients complaints</td>
<td></td>
</tr>
<tr>
<td>♦ Stressful environment for practice staff</td>
<td></td>
</tr>
</tbody>
</table>

| Advanced Access                                                                     |                                                                            |
|-------------------------------------------------------------------------------------|                                                                            |
| ♦ Handling demand altered and face to face consultations used more effectively      |                                                                            |
| ♦ Work pulled into today to “protect the future”                                     |                                                                            |
| ♦ No distinction between urgent and routine appointments                            |                                                                            |
| ♦ Maximum control over workload                                                     |                                                                            |
| ♦ No backlog (capacity and demand are in equilibrium each day)                      |                                                                            |
| ♦ DNAs significantly reduced                                                        |                                                                            |
| ♦ Greater equality of access                                                         |                                                                            |
| ♦ No need for patients to “game” the system                                         |                                                                            |
| ♦ Less noise in the system                                                           |                                                                            |
| ♦ Reduced demand for out of hours services                                          |                                                                            |
| ♦ High practice staff and patient satisfaction                                      |                                                                            |
HOW TO PROGRESS

Understand the profile of demand

This has been referred to previously but is central to achieving advanced access, and is therefore worthy of repetition.

- Understand the daily demand

Daily demand is a request made for appointment on a certain day whether for that day or in the future (Appendix 1).

  - Every day, record the total appointment requests in a practice (regardless of the day to which the appointment is actually assigned). This should include telephone requests; those made in person, and follow-ups. Do this for a week. Compare the daily demand with appointments offered. Appendix 1 has a suggested tally sheet for this.
  - Analyse the volume and type of appointments over the week. Look for predictable variation.
  - Analyse how many appointments (%) each day are follow-ups (e.g. Monday 10%, Tuesday 20%, Wednesday 30%, Thursday 30%, Friday 10%). This is important.

- Monitor follow-up ratios;

  - Are guidelines being followed?
  - Is there variance in follow-up ratios between clinicians? Does this indicate skill needs?
  - The highest daily demand is usually a Monday; eliminate wherever possible follow-ups on Mondays; ask people to return in 8/9/10 days time etc.

Adjust the handling of demand

The aim here is to reduce the demand for face to face consultations and increase the efficient use of face to face time.

- Increase self-help

  - Patient manned ‘desk’ with advice leaflets, video library, for drop-in, (e.g. Hadfield Medical Centre Derbyshire)
  - Consistent line on managing minor illness in the primary care team.
  - Ask patients what they would like and mould advice material accordingly.
  - Self care protocols (e.g. www.manorhousesurgery.co.uk )

- Web site

  - Lots of opportunities for education, links with other sites e.g. NHS Direct decision tree, bespoke minor illness advice. (e.g. Marple Cottage Surgery web site www.marplecottage.co.uk).
• E-mail

In our view, this means of communication will accelerate exponentially in the first few years of this millennium. In one practice, which began e-mail requests for repeat prescriptions, there was an increase from 5% of requests to 30% within 4 months. The users were predominantly the retired. Tips are:

♦ Set up different e-mail addresses for Health Visitor/Community Nurse/Practice Nurse/GPs/Receptionists. Note: patients’ use of e-mail to query receptionists is as high as that for clinical staff. (Example: Dartmouth Hitchcock MC, Nashua, New Hampshire, USA).
♦ Set up an access code for patients (e.g. their computer number) to facilitate confidentiality.
♦ E-mail is used in some places by patients for:
  - checking instructions at recent consultation
  - checking results
  - ordering repeat scripts
  - advice
  - admin functions e.g. checking appointment times, change of address
  - running e-mail ‘surgeries’ (Marple Cottage Surgery/Dr A Midgley, Holmefields Surgery, Exeter)
♦ E-mail is used by practices effectively for e-mail reminders for immunisation and travel vaccination and could be used for call/re-call/follow-up. (Dr A Midgley, Holmefields Surgery, Exeter).

• Creative telephone access

♦ Many practices have now used telephone consultation for dealing with same day demand. This can be done either using a nurse (e.g. Girlington Practice, Bradford) or a doctor (Dr Moyez Jiwa, Bridgegate Surgery, Retford; Dr Kevin Reynolds, St Mary’s Surgery, Southampton; Dr Robin Sharman, Lockwood Surgery, Huddersfield). In general, 40 – 50% reduction in the need for face to face consultation is obtained.
♦ Other practices hold ‘telephone surgeries’ where a series of calls is timetabled into the routine schedule. Patients are asked to call at a specific time or leave a telephone number where they can be reached. This is particularly useful if there is high demand for consultation for a particular clinician. That clinician can introduce the caller to another team member to take forward an aspect of their care, creating an alternative relationship. Using this for follow ups or medication reviews can reduce the need for face to face consultation by 15-20% (Example Queensbury Health Centre, Bradford).

Note: ‘Manage’ the initial contact point: apply the same standards to telephone, e-mail use, personal attendance.
Aim for patients not to have to repeat information
Check frequently the views of patients and their understanding of the system

• Group consultations

♦ Some places have successfully managed high users of the service by bringing them together for an hour’s session. People seem quite happy to discuss their issue jointly. The clinician (nurse/doctor) is there for a half hour, another staff member for the full hour.
Match capacity to demand

Having changed the way demand is handled the next step is to balance the appointment capacity with that demand by ensuring the daily appointment profile matches the demand profile. When moving to this new system there will still be an overhang from the old system of people waiting to be seen (“the backlog”).

As a result of experience, a sequence of events is recommended that eliminates the backlog of appointments and achieves a ‘steady state’ for the practice where capacity and demand are in equilibrium on a daily basis – Advanced Access.

- **Reduce the backlog of appointments**
  1. Calculate the backlog. We define backlog as the number of days between today and the earliest availability of an appointment. A useful measure of the backlog (which helps to smooth out large day to day fluctuations) is the time a patient would have to wait to access the third available appointment slot at the time of making the request. Although this sounds clumsy it proves very useful information for planning e.g. if the third available appointment with a doctor or nurse is in X days, and there are normally Y appointments per day, then the backlog Z = X x Y. This means that Z appointments need to be ‘worked through’ before the backlog will be cleared.
  2. Set up some simple systems for shifting the demand quickly, as above, and a contingency policy i.e. what happens automatically if someone is, off sick, on holiday, or if there is an epidemic.
  3. Match capacity of appointment system to predicted daily demand to ensure that after working down the backlog you are in a stable state. Take into account the number of follow up slots for each day. Eliminate the distinction between urgent and routine appointments.
  4. Set a date by which the backlog will be cleared. This will require hard work and need short term additional capacity e.g. additional time each surgery or alternative shift patterns. Once a stable state is reached, i.e. daily capacity = demand, then it becomes easier to manage any day to day variations in the predicted demand for appointments.

- **Anticipate associated needs**
  - Wherever feasible, maximise the interactions at a single visit to the practice e.g. blood tests, medication reviews, routine BP/weight checks. Build this ability into the system e.g. run a health visitor or nurse clinic alongside surgeries to enhance capacity to deal with near-needs.

- **Build in flexibility**
  - The most effective approaches to improve access decrease the number of appointment types. This increases the flexibility for patients and decreased queues created by multiple appointment types. In advanced access systems, there will be no need for division between urgent and routine, and the follow-up is more predictable. Check how you divide up your appointments, for example, hypertension, diabetes, asthma, etc.
• Maximise personal contact with clinician of patient choice

♦ This is difficult. We know however that re-visits reduce if people can check with someone they trust. Think about alternative forms of access in this respect or a patient’s favoured clinician ‘validating’ the patient seeing someone else e.g. health visitor or nurse for chronic disease management. Telephone management of consultation has proved effective in managing demand for a “popular” doctor.

• Match Team to Work

♦ The team can ask itself four questions:

What is the work - e.g. follow up post MI patients
Who does it now - e.g. GP
Who could do it - e.g. Health Visitor or Practice Nurse, or both.
What is the next step - e.g. current staff assessment and training programme

There are many examples of expanding skills of individuals to change the process that a patient experiences (Example: Health Visitor under five clinic - Adams Practice, Poole; Receptionists as phlebotomists - Nelson Fold Practice, Salford East PCG). Understanding the skill mix changes you need leads into determining training needs and the requirements you wish to put in your Primary Care Development Plan.

NB: Don’t create delays in a process by adding steps/people to an existing one.

• Appraisal Systems

Many people already have appraisal systems in place. However, linking appraisal firmly to a strategic plan (e.g. post MI care will be a nurse led service), identifying skill needs and ambitions and mutually agreeing a programme has been found to be a key success factor in small primary care organisations. Each staff member in these organisations has a clear development plan to enhance their personal skills, which will assist service improvement.

• Personal Development Plans for Clinicians

An example in one practice: each clinician fills out a skill assessment of every other clinician, as well as themselves. In pairs, the self-assessment is compared to peer assessment and development needs identified. The development needs may be linked to new skills required to facilitate a strategic change in service delivery. (Example: Carlisle PCG Transfer of Nursing Skills).

• Involve Patients

Get patients involved in redesigning services: staffing help desks; providing support. (Example: Hadfield Medical Centre, Derbyshire).

• Self Management

Choose a chronic disease programme to maximise self-management by patients e.g. asthma, diabetes. Check on the educative input to patients by staff by testing their understanding of the disease by questionnaire. (Example: www.manorhousesurgery.co.uk)
Contingency plans

Even though most demand can be predicted, unexpected situations will occur. It is better to have automatic policies to meet overflow demand, and to place the decision to implement that plan close to the patient e.g. receptionists. It is better to have a written plan with clear criteria and involve all levels of staff in a group to create that plan.

The sorts of eventualities to be planned into the system (so that there is an automatic response) are:

- Excess demand, certain unpredicted demand
- Holidays, education and other ‘planned’ absence
- Sickness and other 'unplanned' absence
- Seasonal variation (flu etc)

*Example: Vine Surgery, Mendip PCG.*

Measures

If we are to seek improvement, we need to know where we are and track progress with reliable and simple measures. The ones we advocate are also a proxy for the alternative forms of access and different team working we have suggested, since if these actions are effective we know it will ease access for face to face consultation.

% patients seen by practice on day of their choice

This measure captures the ability of the practice to see patients when they want to be seen, which may not be the same day.

*How do I measure it? (see Appendix 1)*

Use a small, random sample of patients (a minimum of 5 in the morning and 5 in the afternoon) and, every day over the course of a week, ask this number of patients whether they had an appointment on the day they requested. Make sure that patients are asked at different times of the day. Count the number of patients who said they were able to get an appointment on the day of their choice, and calculate this as a percentage of the total number of people interviewed. You can either do this continuously to detect early problems, or at greater frequency. The validity of such small samples comes from measuring this over time.

3rd available appointment

*Why should we measure 3rd available appointment for Doctors and for Nurses?*

It will be clear by now that the strategy is to improve various forms of access and handling of demand, which should increase the capacity of the appointment system for face to face consultations. Therefore, measuring available appointments is a proxy for success in those other areas, which will give a good indication of progress. However, we know that if you just take the 1st or 2nd available appointment then this is highly subject to random effect, e.g. a sudden cancellation. The 3rd available appointment is a much more
successful measure of how the system is functioning. The following sounds complicated but actually isn’t when you do it.

**What is the 3rd available appointment?**

If a patient requested an appointment with Nurse A or Dr B then the following routine appointments may be available in chronological order:

1st appointment  4.00 p.m. today
2nd appointment  4.30 p.m. today
3rd appointment  8.45 a.m. tomorrow

The 3rd available appointment would be 8.45 am tomorrow and is recorded as 1 day. If the 3rd available appointment had been 8.45 a.m. the day after tomorrow it would have been recorded as 2 days.

**How do I measure it?**

Experience with many practices has allowed a refinement of the method of measurement to match more closely the working environment of most practices. To produce a summary measure which will give a good indication of the availability of appointments during the course of the month, we suggest using the median appointment time for GPs and for nurses (see footnote on the median below).

There will be some practices for whom the median is not the most appropriate summary of 3rd available appointment (e.g. a two-partner practice where one of the partners is part-time). In this case, it will be necessary to calculate a weighted average. An example of how to do this is included in the “Note on measurements with weighted averages” Appendix 2.

The measurement will be made as follows:

During one month, make the measure on one day in each week. This day will be referred to as the “measurement day” (we advise rotating the day - e.g. Monday during week 1, Tuesday during week 2 etc. - to give a better overall picture of the whole month’s activity).

At noon on the measurement day, use the practice appointment system to count how many working days it would be until the third available routine appointment with a) each GP and b) each nurse.

Take the median value (i.e. the middle value) for GPs and for nurses.

At the end of the month, there will be four median scores for GPs and four median scores for nurses. Take the average of these for each professional group. These will be the measures you can track.

**An example**

A practice has four GPs and three practice nurses. Information collected on one measurement day will look like this:

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**Footnote: The median defined**

The median is a statistic used to describe a series of numbers using a ‘typical’ value by taking the ‘middle’ value in a series. If a series of scores for a measure are, for example: 3, 7, 6, 1, 1, 5, 3 - to calculate the median, rearrange the sequence of numbers into size order (1, 1, 3, 3, 5, 6, 7) and count how many numbers there are (seven in total). The median will be the middle value, which will be the fourth number: 3. If there are an even amount of numbers, take the average of the middle two.
Ordering the GP scores gives: 1, 3, 4, 6. The average of the two middle values is \((3+4) ÷ 2 = 3.5\). This is the median for GPs for this day.

Similarly, ordering the scores for nurses gives: 3, 4, 8. The median here is 4.

There are 4 medians for GPs and 4 medians for nurses. For each group, take the simple average (i.e. add these scores together and divide by 4). This gives the 3rd available appointment measure for each of these two professional groups.

**Do not include**

- Any Doctor or Nurse who is on holiday during the measurement week unless they are covered by a locum;
- Any appointments for urgent cases that may become reclassified later for routine cases (these are not routine appointments at the time of measurement);
- Saturday or Sunday (i.e. when collecting data on a Friday, if the 3rd available appointment is on Monday, this counts as one day).

The variety of ways in which practices operate and are organised poses difficulties for developing ‘standard’ measures. The ones suggested have been refined through the practical application of them to hundreds of practices. But we must also remember that information should be *useful*, not necessarily *perfect*.

During use of the measure, a number of questions frequently arise. It may assist practices to be aware of these queries and response.

**How does the 3rd available appointment relate to the target of 90% of patients accessing their health care professional the next working day?**

“Access” in this context means a variety of things, including telephone contacts, electronic mail and so on. If we tried to measure all of the different forms of access and whether they were available during the next working day, the measurement task would be enormous. However, all the different forms of access have an impact on face-to-face appointments, and face-to-face consultations are relatively easy to count. In this way the 3rd available appointment is a *proxy* measure, meaning we can be confident we have reached the 90% target if the 3rd available appointment is the next day for the practice.
Why measure the 3rd available appointment for all GPs and all nurses and combine them - why not the 3rd available appointment with any clinician?

If the measure was of appointment availability with anyone in the practice, to get a true picture the appointment would have to be something like the 6th or 7th available appointment and adjusted for practice size. Most patients tend to consult the same GP or nurse where possible. Therefore, to try to represent the total availability of routine appointments in the way in which most patients will use the practice, it is suggested the measurement is performed for each clinician then aggregated.

What about locum staff?

Treat the locum as if they are the GP that they are replacing.

What if we have a GP who’s very rarely in the practice?

If there is one member of the clinical staff who has very few clinical sessions and whose figures would unfairly distort the summary measure for the practice, they can be excluded from the figures.

What if our practice nurses don’t operate an appointment system like the GPs?

Practice nurse workloads may include a significant proportion of work for which there are not ‘routine’ appointments (for example, chronic disease management clinics). If there are ‘routine’ practice nurse appointments for any other part of their work, then calculate the measures for these. If there is no appointment system for practice nurses at all - i.e. there is no part of their work where patients may book a routine appointment with a nurse - then you will not be able to calculate the 3rd available appointment measure for this group.

What if we only have two GPs/practice nurses and one of them is part-time?

Calculating a median for two members of staff in this case would not give a good indication of true waiting times. In this instance, it would be better to calculate an average, weighted for the part-time proportion of staff time. Full details of how to do this are given in Appendix 2.

Continuous monitoring

Once the system is stable, you should be able to switch to a different measure for monitoring.

- Monitor % available appointment on a given day.
- If this drops, check daily demand to see that there hasn’t been a change.
Appendix 1

Assessing Current Daily Demand

Practices need to measure the daily demand for appointments. This simply involves counting the number of requests for appointments every day for one week and will enable practices to:
- understand the scale of total demand for appointments;
- identify the variation that occurs on different days of the week.

Below is an example of a data collection tool to record appointment requests. Requests are recorded for the different types of clinicians within the practice. This information includes requests made on a particular day but for a future date. Record requests made by telephone, those made in person, and follow-ups. Identify follow-ups separately.

Example tick sheet

<table>
<thead>
<tr>
<th>Appointment with/for</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Total for week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td>#!!!</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow-ups</td>
<td>#!!!</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td>///</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow-ups</td>
<td>///</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice Nurses</td>
<td>#!!!</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow-ups</td>
<td>///</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes

Although many practices will have other people working in the team who see patients, their work is part of the alternative route for dealing with demand and not measured as part of this exercise.
Appendix 2

Note on measurements with weighted averages

Calculating weighted averages

If the practice has part-time clinicians, these need to be allowed for in the calculations, otherwise the measure for the practice may be distorted - waiting times for part-time staff may make the overall figures for the practice appear too long.

One of the ways adjustment for part-time clinicians can be made is by taking a weighted average in the following way:

1) Record the number of days until the 3rd available appointment for each GP/Nurse during the month as usual but do not calculate the median as described previously.
2) Calculate an average (mean) waiting time for each individual GP and nurse.
3) For each individual, multiply the average figure by their whole time equivalent figure (e.g. as above).
4) add up the figures from these sums for all of the Doctors and all of the Nurses giving one figure for all Doctors and one figure for all nurses;
5) Divide these numbers by the total whole-time equivalent figure for each group (e.g. a full time nurse and a half-time nurse would be 1+0.5=1.5). These will be the weighted average times.

Example calculation for Nurses

<table>
<thead>
<tr>
<th>Staff</th>
<th>Whole time equivalent fig (WTE)</th>
<th>Number of days to 3rd appointment (average for the period)</th>
<th>WTE x number of days to 3rd appointment</th>
<th>Weighted average:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse A (full time)</td>
<td>1</td>
<td>3</td>
<td>1 x 3 = 3</td>
<td></td>
</tr>
<tr>
<td>Nurse B (half time)</td>
<td>0.5</td>
<td>4</td>
<td>0.5 x 4 = 2</td>
<td></td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>1.5</strong></td>
<td><strong>5</strong></td>
<td><strong>5 ÷ 1.5 = 3.3 days</strong></td>
<td></td>
</tr>
</tbody>
</table>

Nurses 3rd available appointment measure = 5 ÷ 1.5 = **3.3 days** (round to one decimal place).
CONCLUSION

Looking systematically at the weekly work of a practice is the starting point to improve access. Gaining an understanding of both the totality of the demand as well as its shape throughout a normal week is the building block for change.

This change involves altering how that demand is handled, maximising the use of self-help, telephone and electronic communication. Part of the improvement includes analysing who handles the demand, who could handle it and how to make that happen. A sequence of simple things starts to unblock the old system, creating a balance between demand and capacity. Ensuring this balance is maintained by having plans for absences or unexpected high demand is the final piece of the jigsaw – the picture of Advanced Access.

All changes are carefully measured, but in simple ways that allow the tracking of improvement. So, what do those who have experienced Advanced Access think?

‘I’ve worked here for 15 years; the two weeks since we introduced advanced access have been the best of my working life’. A Receptionist.

‘We’ve certainly seen a huge increase in clinician satisfaction. I myself have found surgeries much more acceptable, I feel much less stressed, much less hassled, I feel I’m actually giving much better patient care’. A General Practitioner.

‘Can I say how much better the new staff are than the old ones, I don’t have to fight to see you, it is so reassuring’. A patient, commenting on an unchanged staff team.

As a clinician, improving access is not just about meeting targets; it is about improving care for our patients. Seeing people when they want to be seen pre-empts problems and, after all, is it not what we would want for ourselves or our own important people? As Paul Batalden says, ‘every system delivers exactly the results it is designed to give’ – pushing the old system harder won’t work, creating more of the old system won’t work, thinking differently does.