

Andrew Knight Tony Lembke

# Appointment Zen – shaping demand and matching capacity

#### **Background**

Ten years of experience with hundreds of general practices in the Australian Primary Care Collaboratives program has provided many lessons for improving practice appointment systems.

#### **Objective**

In this article, we describe how general practitioners can, by actively managing our appointment systems, reduce waiting times and delays, improve patient care, improve our quality of life and improve practice financial viability.

#### **Discussion**

Demand is finite and predictable. We can shape our demand by influencing when, why and for whom people make appointments. We can change our daily appointment numbers and our team capacity to match our reshaped demand. Contingency plans for expected and unexpected drops in capacity can prevent appointment backlogs. Embedding and monitoring our demand and capacity management can help ensure smooth flow of patients through the practice with good care and improved staff and patient satisfaction.

#### **Keywords**

appointments and schedules; general practice; health services accessibility

Demand for our general practice services can seem uncontrollable and overwhelming. It seems no matter how hard we work or how late we stay back, someone wants more. Finding time to complete paper work or do new activities doesn't seem possible. In fact, demand for our services is finite. It can be measured and analysed. Once we understand our demand we can influence it, shape it and, in turn, change the capacity of our practice to match the reshaped demand. Waiting times can be reduced and patient care improved, as can practitioner quality of life and practice financial viability.

In a previous article we described how to measure demand in a practice and monitor appointment system functioning.1 We have also described five basic appointment system types that we

encountered in our work with the Australian Primary Care Collaboratives Program (APCC).<sup>2</sup> In this article we share practical ideas to help improve practices, based on experience over a decade of work with hundreds of Australian practices in the APCC3 and on overseas experience. 4-6 Collaborative practices learn to make changes using the Model for Improvement, which is a tool designed to support safe and effective change.7

## Shaping demand

Once we understand the size and nature of patient demand we can shape it, influencing when people come, why people come and how they are handled.

## Influencing when people come **Keep Mondays free**

There is always more demand on Mondays. It makes sense in most practices not to book elective appointments such as excisions or care plan appointments on a Monday. This thinking will lead to booking elective appointments out of influenza season or holiday season. By measuring demand you can know with confidence when your busy times are and plan rationally.

## Influence when people book appointments

Although some people need an appointment on a specific day or time, many patients are flexible concerning routine appointments. Steer flexible people to less sought after times, (eg. 'how about Wednesday afternoon at 3pm?'). When we see a patient on a Monday, asking them to return in a month will often mean a follow-up on a Monday. Instead, nudge them to another day. Airlines use price signals to influence booking of flights they know will be difficult to fill. Although few practices actually offer a price differential, receptionists can aim to 'sell' the cheaper seats.

## Anticipate associated needs of patients and meet them

Try to meet every need that you can in today's consultation. Provide repeat prescriptions to prevent a return visit just for that. Ask the patient if there is anything else to discuss. Check weight, blood pressure and order routine blood tests. Suggest to patients that they come with a written list so that things are not forgotten. If possible, ask the practice nurse to do urinalysis and weight or blood pressure measurements before the patient enters your room for the consultation. Spending an extra 5 minutes today or utilising other practice staff might gain you a whole appointment next week.

## Rationalise follow up

We influence future demand by our follow-up habits. How often do I see my patients with well-controlled diabetes? Do I ask everyone to come for normal results?

Each of us needs to think about our use of follow-up visits. If possible, agree as a practice on a consistent protocol, preferably following evidence-based guidelines. In this way it may be possible to free up significant numbers of appointments and decrease variation in patient care.

#### Influencing why people come

### Increase patients' selfmanagement

By improving patients' self-management skills you can improve physiological measures of disease, quality of life, health status and functional status. Improved self-management skills can improve satisfaction with your service, risk behaviours, knowledge, service use and adherence to treatment. Effective interventions are educational sessions, motivational counselling and use of educational materials.<sup>8</sup>

Each member of the team should reinforce messages about self-management. A care plan is a useful tool to assist with this. Provision of self-management support by a range of providers such as nurses, pharmacists, dietitians and community health workers can increase self-management and improve outcomes.<sup>9</sup>

#### **Target frequent flyers**

Some people attend often but can their needs be met without a consultation with the doctor? Perhaps

with a regular scheduled appointment once a month they can self-manage for longer and be confident that they can discuss issues during their scheduled appointment. See *Case 1* for an example of an APCC practice that used this strategy to good effect.

#### **Involve patients**

Some practices in the APCC have begun involving their patients to help design their service and influence how patients access it.

## Change how people are handled

#### Use staff to their peak skill set

Are some staff members under-employed while others work flat out? Can GPs' time be better leveraged by enlisting the help of other staff? Some APCC practices have:

- use a chronic disease coordinator to run a chronic disease management clinic
- use a practice nurse to do pap smears or give normal pathology results (*Table 1*); do routine blood pressure measurements, BMIs, urinalysis, take blood, do wound management and vaccinations; and coordinate care plans and reviews
- use non-clinical staff to sterilise equipment; 'room' patients, preparing them for the GP by opening the computer record, entering presenting complaints, recording observations, chasing up equipment or results that will be needed.

#### Even up doctor panels

Are some doctors booked out for weeks while others have capacity on the day? Although some patients seem 'welded' to a particular doctor, when we analysed demand we were surprised to find many patients were happy to see another doctor for a particular issue. Receptionists can help by steering new patients or those with an acute condition or without a strong preference to doctors in less demand. Some practices use a traffic light system with busy doctors 'red' (no new patients), others 'yellow' (new patients under some circumstances; eg. relatives of existing patients) and others 'green' (accepting all comers). Some practices 'buddy up' more senior and junior doctors to form a care team. (eg. 'I'll get Fiona to review you in 2 weeks time, and I'll see you in a month. She'll let me know what's happening').

### **Maximise continuity**

Improved continuity of primary care improves patient satisfaction and health outcomes and decreases the use of health systems resources. 10 Some authors suggest an association between increased personal continuity and decreased demand for visits. 11 Utilising the practice team in a way that increases continuity of care will improve outcomes and satisfaction.

#### **Quick clinics**

A popular strategy with APCC practices was to set aside time for short appointments. A patient requiring a repeat prescription or a referral renewal could book with their doctor for the quick clinic on the understanding that only that issue would be dealt with. Feedback suggests this is efficient for patients and preserves capacity for more complex issues.

## Develop alternative ways for patients to access the practice's services

## The practice website

Websites can provide education and links to other resources (eg. community health programs, exercise programs, patient self-management resources). Some practices have started online booking, <sup>12,13</sup> interfacing the appointment system with the website. Results, reminders and script repeats can also be organised online. (See *Case 2*)

#### **Email**

A marked change associated with the implementation of the Patient Centred Medical Home in the US has been increased email contact between doctors and patients. <sup>14</sup> As funding models change in Australia this may become more common. The Royal Australian College of General Practitioners standards require practices to have policies around the use of email for clinical communication. <sup>15</sup>

#### **eConsultations**

Telephone consulting has long been used overseas, <sup>16,17</sup> although funding models make it more challenging in Australia. Telephone triage can reduce the need for face-to-face consultations by up to 39%. <sup>18</sup> Skype consultations are offered by some practices. There are services currently available <sup>13</sup> that can facilitate the provision of results and other

Table 1. Analysing demand to find extra capacity – a plan/do/study/act cycle from an early APCC practice		
Plan	Check on changes after streamlining of pathology results has been implemented for one month.  Survey showed a bottleneck of >50 appointments each week that were being wasted on unnecessary follow-up appointments.	
Do	Having patients now phone in at a set time of the day. A receptionist is able to inform them if the doctor says no follow up required or if the doctor does need a review with the patient.	
Study	The new pathology review system has allowed access for other patients to see their nominated doctor at an earlier time. Most patients are now seeing their doctor on a day of choice. Ease at front desk is great as the pressure has dropped because more appointments are available for patients to see their doctor.	
Act	Will keep a watch on new system and complete another survey in 1–2 months to assess what access is now available to patients i.e. those that are actually reviewing for path results.	

services without a consultation. This is likely to be a growing strategy for shaping demand.

## Match capacity

Having shaped demand so that patients come at the best time, for the right reasons and are being handled in the optimal way, the next step is to change the capacity, to meet this shaped demand. This is a continuing process.

## Match the appointments

### Match the overall number of appointments

Many APCC practices are surprised when they measure demand and capacity to find they are in balance. Their apparent excess demand is actually delay (backlog). However, some find that even when demand is shaped to be as effective as possible and the skills of the practice team are utilised at their peak, they simply do not have enough appointment slots in the week. Finding extra doctors may be necessary and can be challenging. Training registrars in the practice can be one solution. As well as the extra pair of hands during the training term, many practices have found that their high-quality training environment has encouraged registrars to stay on permanently when training is complete.

#### Match each day

The most obvious step is to ensure that the maximum number of appointments is available on the days when demand is highest. The work done on measuring demand may indicate that the practice requires more doctors on Mondays and Thursdays. It may be necessary to reshuffle rosters and/or extend the skill mix of the team to ensure there are enough team members working on high demand days.

#### Match the type of appointments

Analysis of demand may indicate task mismatch with, for instance, doctors doing a lot of activities better done by nurses. Nursing appointments could be increased to reduce the pressure on doctor appointments. Some appointments, such as care plans and health assessments, could be booked at quieter times. One practice in the APCC discovered they were using many appointments to give normal results (Table 1). Some use other strategies, including a web-based service, to handle some of these results.

#### Match the skills

An inventory of the team's skills should be taken and the team used to the maximum level of skill. For example, the receptionist might also be an ECG technician (ours was!). Consider whether the practice nurse could be doing a much wider range of clinical work (such as chronic disease management) than currently.

## Develop new skills in your existing team

Training staff to do venepuncture, ECGs, pap smears, weight and height measurements, and other tests may increase job satisfaction and free up doctors.

Managing populations requires new administrative skills such as database management.

#### Add new team members

The best solution may be to take on new staff. Skills in coordinating chronic disease care have been identified by many APCC practices as their main need.

### Case 1. Shaping demand and matching capacity

#### **Dr Kingsley Pearson**

At the time I participated in the APCC I was running a solo practice. We measured demand at 180-200 requests for appointments a week and I had a capacity of 150-160, so we were consistently 30-40 appointments short each week. The result was our third available appointment measure went out to 10-14 days and the practice felt like a pressure cooker.

I decided to look at the nature of our demand by analysing our diabetes and heart disease register over the preceding 12 months. Our 62 patients with diabetes presented 8.2 times a year, on average, for a total of 505 consultations. Our patients with coronary heart disease came 9.1 times in the year, on average, for a total of 584 consultations.

I decided to take the plunge and employ a practice nurse to do more than immunisations, dressings and wound management. I intended the role to evolve into being a chronic disease practitioner. I knew a nurse living locally with 25 years' experience in rehabilitation, community nursing and care planning.

She started for two sessions a week and rapidly moved to 2 full days. My role was in the care plan and she took care of the team care arrangements. She became an ongoing motivator for change (eg. smoking cessation). She made followup appointments and had patients who booked to see her.

It was a remarkable change. The appointment book was freed up and the third available appointment came back to 1-2 days. Patients were able to book appointments to see me and the pressure cooker feeling left us.

Table 2. Situations requiring a contingency plan			
Issue	Solution		
	Expected	Unexpected	
Increased demand	eg. flu vaccination time, winter:  Notify patients when their usual doctor will be on holiday so they can plan around it  Leave capacity unbooked before and after holidays to cope with extra demand  Don't book elective activities for remaining doctors during leave	eg. health scares, natural disasters, epidemics:  Reschedule booked appointments/flexible appointments eg. health assessments  Receptionists explain delays as patients arrive and offer appointment on another day or with a nurse  Sign-in reception explaining delays or offering appointments on another day	
Decreased capacity	eg. holidays, study leave:  • Book a locum if possible  • Have enough doctors so that someone is always away and the practice is 'self-covering'  • Clinics for 'flu vaccination  • Coordinate holidays so only one person is off at a time	eg. doctor calls in sick, car trouble, family issues:  • Agree in advance to cancel tea breaks / shorten lunch in an emergency  • On-call' system of doctors willing to come in for extra time  • Cooperate with neighbouring practices to divert patients if needed  • Institute practice nurse triage	

## Embed and monitor the system

Continually analysing and shaping demand and matching the team will improve the care provided and the financial viability of the practice. To ensure continued improvement, the changes need to become a part of the routine operations at the practice.

There are some key ways to do this:

- Job descriptions and new staff induction can include key aspects of the staff member's role in ensuring good access to the practice. As staff move on corporate knowledge is retained
- Have 'access' as a standing item at the practice meeting
- Regularly inform staff about access measures. Put in place a plan to regularly monitor the system so that any fluctuations are identified and addressed early. Determine the key indicators of access performance and make their collection and reporting routine. Routinely review these measures and manage the system. Listen to staff and patient feedback.

Maintaining an effective appointment system requires agility. Managing variability requires active management. 'Appointment golf' and other strategies outlined in our previous articles may be helpful.<sup>1,2</sup>

## **Contingency plans**

In addition to matching demand to capacity to improve a practice's efficiency, consideration should also be given to potential disruptions, such as staff members going on holidays, sick leave or to conferences. Expected or unexpected, these disruptions can prevent a practice from meeting demand smoothly. Build-up of a backlog can block up a practice's appointment system for weeks. Planning for contingencies will enable the practice to maintain the benefits achieved (*Table 2*). A contingency plan should be agreed and documented. People whom the plan affects need to agree to it.

The plan will state the circumstances that will trigger action and will identify and empower the person who will activate it.

#### Conclusion

The match between well-shaped demand and well-maintained capacity can help improve outcomes, incomes and quality of life in general practice.

Thinking this way helps establish that patient care is the job of the whole team. It can only be achieved if the team is supportive of each other, committed to each other and committed to patient care.

## Case 2. eConsults, eMessages, eAppointments

#### **Dr Andrew Gowers**

Holdsworth House Medical Practice www.holdsworthhouse.com.au

'We do skype and telephone consultations and also use SMS and email. Patients can email appointment requests through our website, which we confirm by email or text. It's not 'alternative' for us now. Doctors spend maybe half an hour a day on e-messaging. It's efficient and frees up more time for consulting.

Skype consults are great for people who are overseas or out of town. Results are regularly given by email with text tailored by the doctor to the clinical circumstance. This is quick, reduces administrative costs and personalises doctor/patient communication.

Our philosophy is to support our patients in living as normal lives as possible. We have many patients with serious chronic illness whose healthcare consumes their time. Why insist on a 3-hour exercise of attending the practice for face-to-face results? Sometimes this is essential and each doctor decides how to handle each clinical situation.

Our patients love it. Young people (and many older people) prefer to communicate this way and it can be more efficient. It frees our clinicians to do the higher value activities that patients appreciate and are willing to pay for.

We try to be open to new approaches. Suggestions come from our staff, from what we see on our travels and other industries. We try to nurture new ideas and not to punish 'failure'. If they work that's great and if they don't we learn!'

#### **Authors**

Andrew Knight MBBS, MMedSci (ClinEpid), FRACGP, is Chair, Expert Reference Panel on Access, The Australian Primary Care Collaborative, The Improvement Foundation, Adelaide, South Australia, a general practitioner, Katoomba, and Conjoint Senior Lecturer. The Fairfield General Practice Unit, NSW. awknight@aapt.net.au

Tony Lembke MBBS, FRACGP, FACRRM, is Clinical Director, The Australian Primary Care Collaborative, The Improvement Foundation, Adelaide, South Australia, and a general practitioner, Alstonville, **NSW** 

Competing interests: None.

Provenance and peer review: Not commissioned; externally peer reviewed.

#### References

- Knight A, Lembke T. Appointments getting it right. Aust Fam Physician 2011;40:20-23.
- Knight A, Lembke T. Appointments 101 how to shape a more effective appointment system. Aust Fam Physician 2013:42:152-56.
- Knight AW. Learning from four years of collaborative access work in Australia. Qual Prim Care 2009:17:71-74
- Murray M, Berwick DM. Advanced access: reducing waiting and delays in primary care. JAMA 2003;289:1035-40.
- Clinical Microsystems. Improving access to care toolkit. Available at www.clinicalmicrosystem.org/ toolkits/improving\_access [Accessed 9 October
- Oldham J. Advanced Access in Primary Care. Available at www.internetgroup.ca/clientnet new/ docs/Advanced%20Access%20in%20Primary%20 Care.pdf [Accessed 9 October 2013].
- The Improvement Foundation. Australian Primary Care Collaboratives. The Model for Improvement. Available at http://apcc.org.au/about\_the\_APCC/ what is a collaborative/the-model-for-improvement [Accessed 4 December 2013].

- Zwar N, Harris M, Griffiths R, et al. A systematic review of chronic disease management. Research Centre for Primary Health Care and Equity, School of Public Health and Community Medicine, UNSW, 2006. Available at http://aphcri.anu.edu.au/researchprogram/aphcri-network-research-completed/ stream-four-translating-evidence-policy/systematicreview-chronic [Accessed 28 August 2013].
- Battersby M. Von Korff M. Schaefer J. et al. Twelve evidence-based principles for implementing selfmanagement support in primary care. Jt Comm J Qual Patient Saf 2010:36:561-70.
- van Walraven C, Oake N, Jennings A, Forster AJ. The association between continuity of care and outcomes: a systematic and critical review. J Eval Clin Pract. 2010;16:947-56.
- 11. Murray M, Tantau C. Same-day appointments: exploding the access paradigm. Fam Pract Manag. 2000;7:45-50.
- Appointuit. Available at http://appointuit.com/ [Accessed 28 August 2013].
- 13. Ozdocsonline. Available at www.ozdocsonline.com. au [Accessed 28 August 2013].
- Rosland AM, Nelson K, Sun H, et al. The patientcentered medical home in the Veterans Health Administration. Am J Manag Care 2013;19:e263-72.
- The Royal Australian College of General Practitioners. Computer and information security standards, Melbourne: RACGP, 2013, Available at www.racgp.org.au/vour-practice/standards/computer-and-information-security-standards/standard-6 [Accessed 4 December 2013].
- 16. Jiwa M, Mathers N. Telephone consultations are routinely used. BMJ. 2003;327:345.
- Oldham J. Telephone use in primary care. BMJ 2002:325:547.
- Jiwa M, Mathers N, Campbell M. The effect of GP 18. telephone triage on numbers seeking same-day appointments. Br J Gen Pract 2002;52:390-91.

correspondence afp@racgp.org.au