



The CAHPS Ambulatory Care Improvement Guide

Practical Strategies for Improving Patient Experience

Section 6: Strategies for Improving Patient Experience with Ambulatory Care

6.A. Open Access Scheduling for Routine and Urgent Appointments

To download the Guide's other sections, including descriptions of improvement strategies, go to <https://cahps.ahrq.gov/quality-improvement/improvement-guide/improvement-guide.html>.

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6.A. OPEN ACCESS SCHEDULING FOR ROUTINE AND URGENT APPOINTMENTS

6.A.1. The Problem

Most patients that they always or usually received care as soon as they needed it, but eight to ten percent of respondents to the Clinician & Group Survey report that they *never or only sometimes* got appointments for the care they needed as soon as they needed to be seen—even in urgent cases. Benchmark data from 2014 is shown below in Table 6A-1.

Table 6A-1. How often respondents got needed care: Percent answering never or sometimes

	Visit Adult – Version 2.0 (2014)	12/6-Month Adult/PCMH Combined – Version 2.0 (2014)	12/6-Month Child/PCMH Combined – Version 2.0 (2014)
Getting Timely Appointments, Care, and Information	12%	14%	12%
Got appointment for urgent care as soon as needed	10%	10%	8%
Got appointment for check-up or routine care as soon as needed	6%	7%	8%

Source: CAHPS Database Online Reporting System. Comparative data from 2014. Accessed July 28, 2015.

Studies have shown that inadequate access to a primary care provider remains a major source of patient dissatisfaction.¹ One study cited in *JAMA* confirms that patients are not getting the care they need when they need it:²

- In a survey of insured adults under 65, 27 percent of those with health problems reported difficulty gaining timely access to a clinician.
- From 1997 to 2001, the percentage of people reporting an inability to obtain a timely appointment rose from 23 percent to 33 percent.
- In 2001, 43 percent of adults with an urgent condition reported that they were sometimes unable to receive care as soon as they wanted.
- 28 percent of women in fair or poor health reported delaying care or failing to receive care because of an inability to obtain a timely physician appointment.

¹ Forjuoh SN, Averitt WM, Cauthen DB, et al. Open-access appointment scheduling in family practice: Comparison of a demand prediction grid with actual appointments. *J Am Board Fam Pract* 2001;14(4):259-65.

² Murray M, Berwick DM. Advanced access: Reducing waiting and delays in primary care. *JAMA* 2003;289(8):1035-40.

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6.A.2. The Intervention

Open access—also known as advanced access and same-day scheduling—is a method of scheduling in which all patients can receive an appointment slot on the day they call, almost always with their personal physician. (Note: “Open access” sometimes refers to the elimination of gatekeepers in HMOs so that patients have direct access to specialists. In this context, it refers only to same-day appointments.) Rather than booking each physician’s time weeks or even months in advance, this model leaves about half of the day open; the other third is booked only with clinically necessary follow-up visits and appointments for patients who chose not to come on the day they called (typically no more than 25% percent of patients).

This model breaks away from the traditional approach of differentiating between urgent and routine appointments, which results in the routine visits being put off until a later date. Instead of triaging callers by clinical urgency, front-desk staff simply sort the demand for appointments by clinician. According to experts in the design and implementation of the model, it is effective in both managed care and fee-for-service environments.³

“It has one very simple yet challenging rule: Do today’s work today.”

Murray M, Tantau C. Same-day appointments: Exploding the access paradigm. *Fam Pract Manag* 2000;7(8):45-50.

In essence, the open access model applies the principles of queuing theory and industrial engineering in an effort to match the demand for appointment visits with the supply (i.e., the time of clinicians). It is based on the supposition that the problem is not lack of capacity but an imbalance between supply and demand.

6.A.3. Benefits of This Model

While the open access model has not yet been formally evaluated with systematic controlled studies,⁴ anecdotal evidence points to several benefits of this approach:

- It enables practices to reduce or eliminate delays in patient care without adding resources. Better access to care typically results in higher levels of patient satisfaction; physician satisfaction also improves as long backlogs and angry patients are no longer a daily source of frustration.⁵
- In contrast to what many physicians anticipate, patient demand for appointments decreases, mostly because patients are more often able to see their own clinician.²
- The ability of patients to see their personal physician enhances continuity of care, which is associated with both better health care and higher patient satisfaction.

³ Murray M, Tantau C. Same-day appointments: Exploding the access paradigm. *Fam Pract Manag* 2000;7(8):45-50.

⁴ Murray M, Bodenheimer T, Rittenhouse D, et al. Improving timely access to primary care: Case studies of the advanced access model. *JAMA* 2003;289(8):1042-6.

⁵ Murray M, Tantau C. Must patients wait? *Jt Comm J Qual Improv* 1998;24(8):423-5.

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- Finally, medical practices often realize cost and efficiency savings. Because patients no longer have to deal with long waits, the number of “no-shows” is likely to decrease, so clinical time is used more efficiently. Also, less staff time is required to manage the no-shows and the backlog of patients.

6.A.4. Implementation of This Model

The literature on open access suggests that medical practices can implement this model in a few months by working through the following steps:

1. Measure supply and demand as precisely as possible.
2. Establish a test team of providers who are willing to try the system.
3. Reduce the backlog of appointments. This may take 6 to 8 weeks of extra work. To facilitate this difficult task, practices may want to set a target date and agree that visits will not be pre-scheduled beyond that date. Another useful recommendation is to apply the concept of “max packing.” The idea is to reduce the demand for future visits by taking care of any upcoming preventive or screening needs whenever the patient comes in for a necessary visit—regardless of the reason for that visit.
4. Simplify the appointment types and make them all roughly the same length. One recommended tactic is to minimize complexity by limiting the practice to three appointment types:
 - Personal, where the patient is seeing his or her physician;
 - Team, where the patient is seeing someone else on the clinical team; and
 - Unestablished, where the patient does not yet have a specific physician.

Appointment times can also be specified as either short or long, where a long appointment is roughly equivalent to two short ones.³

5. Develop a contingency plan for days (or parts of the day) when demand far outstrips the availability of physicians. This plan should identify who can supplement or substitute for each physician, if and when needed. Also, the group should be proactive about planning for those times when they can predict increases in demand, such as visits for school physicals or flu shots.
6. Reduce demand for one-on-one visits with patients. One helpful tactic is to identify and address sources of unnecessary visits based on outdated clinical protocols, such as routine follow-up visits for urinary tract infections or annual Pap smears. Another approach is to implement group visits to better manage care for patients with the same chronic condition. (To learn more, refer to the strategy called “Group Visits”). Finally, clinicians can use the phone and email effectively to address concerns that do not require a visit.

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7. Once the practice is able to offer same-day appointments, assess its effectiveness by measuring appointment availability on a daily basis (e.g., third next available appointment). (For information on the specific measures that you can use to evaluate and monitor the model, refer to Murray M, Berwick DM. Advanced access: Reducing waiting and delays in primary care. *JAMA* 2003 Feb 26;289(8):1035-40.)

6.A.5. Challenges of This Model

While the implementation of open access scheduling may seem daunting, the primary barriers are psychological rather than logistical. For both clinicians and their staff, this approach seems unintuitive; it defies both their beliefs and their experiences with scheduling systems. Because routine and urgent requests are treated similarly, the model also forces them to abandon the solidly ingrained notion that routine care can wait. Finally, clinical and administrative staff are typically skeptical that existing resources can meet demand.²

That said, the logistical challenges should not be discounted. First, the model requires accurate data on the size of the patient population (for each doctor), the level of demand for visits, and the number of appointment slots available each day. In particular, it relies on the ability to accurately predict demand for same-day appointments.⁶ But demand is hard to measure retrospectively because the number of past appointments is more a factor of the supply of clinical time than of the demand for services. Medical groups need to obtain this data prospectively, usually by tracking patients' calls for appointments as well as requests by clinicians for follow-up appointments. Some practices rely on mathematical models for predicting demand, with mixed success. Computer-based information systems that integrate billing and scheduling can be useful for providing the initial data input for such models.⁶

The second major challenge is reducing the backlog of appointments. To do this, the group may need to see more patients each day for 6 to 8 weeks.⁷ A study of practices that had implemented open access scheduling found that all of them had trouble working down the backlog. Moreover, the task was especially difficult for larger organizations, especially when the model was introduced by management rather than by the physicians themselves. One contributing factor was that management recognized benefits in the form of reduced delays in appointment before the physicians saw benefits in the form of a less stressful workday.² Finally, there are some practices where the demand for appointments vastly exceeds the supply of clinical services. While the open access model can handle excess demand on a given day, no scheduling system works effectively if demand is greater than capacity on a permanent basis.

⁶ Forjuoh SN, Averitt WM, Cauthen DB, et al. Open-access appointment scheduling in family practice: Comparison of a demand prediction grid with actual appointments. *J Am Board Fam Pract* 2001;14(4):259-65.

⁷ Murray M. Patient care: Access. *BMJ* 2000;320(7249):1594-6.

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To overcome both the psychological and logistical barriers, medical groups may want to join a collaborative where they can learn from others dealing with the same issues, or hire a consultant who can guide them through the more challenging terrain.

6.A.6. Examples

In the late 1990s, HealthPartners of Bloomington, Minnesota, identified members' dissatisfaction with access to care as a major concern. CAHPS data indicated that access to appointments remained a source of frustration for patients; this finding was corroborated by complaints data (specifically, complaints related to access had been increasing over the past year and represented 51 percent of quality of care complaints) as well as a survey of satisfaction with behavioral health. In addition, an analysis of internal data found that appointment wait times had steadily increased over the course of the last several years.

In 1999, several HealthPartners' medical groups participated in "Action Groups" supported by the Institute for Clinical Systems Improvement (ICSI) in collaboration with IHI. Through the action groups, the teams learned about the Advanced Access model and received support in implementing it at some of the clinics within their medical groups.

Initial assessments revealed little progress in improving patients' experiences with appointment access, primarily because the clinics were struggling to overcome some of the challenges of this model—including the backlog reduction and the skepticism of clinical and other staff. However, over time, the clinics have made measurable progress, including a statistically significant increase in the percentage of respondents that were very satisfied with their ability to get an appointment at their clinic at a convenient time.⁸

Other examples of successful implementation of open access scheduling include the following:⁵

- **Kaiser Permanente in Roseville, Northern California.** This clinic—which was the site at which the open access strategy originated—succeeded in lowering the wait time for routine appointments from 55 days to 1 day in less than a year. It also increased the changes that a patient would see his or her own physician from 47 percent to 80 percent.
- **The Mayo Clinic's Primary Care Pediatric/Adolescent Medicine Team.** Implementation of an open access model resulted in a reduction of the wait time for routine appointments from 45 days to within 2 days. The strategy also succeeded in lowering the number of daily visits on average.

⁸ HealthPartners. Quality Improvement/Preventive Health Activity Summary: Improving Satisfaction with Appointment Access - Submission of HealthPartners to NCQA; 2003.

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- **The Alaska Native Medical Center.** At this medical center, open access led to a drop in the wait time for routine appointments in family medicine and pediatrics from 30 days to 1 day. They were also able to increase the percentage of patients seeing their own physician from 28 percent to 75 percent.
- **Fairview Red Wing Clinic, Red Wing, Minnesota.** In addition to reducing the wait time for routine appointments, this clinic succeeded in reducing the time required to cycle patients through the office from 75 minutes to 40 minutes. At the same time, it increased their time with physicians.

Read More About Open Access

- Murray M, Berwick DM. Advanced access: Reducing waiting and delays in primary care. *JAMA* 2003 Feb 26;289(8):1035-40.
- Murray M, Bodenheimer T, Rittenhouse D, et al. Improving timely access to primary care: Case studies of the advanced access model. *JAMA* 2003 Feb 26;289(8):1042-6.
- Murray M, Tantau C. Same-day appointments: Exploding the access paradigm. *Fam Pract Manag* 2000;7(8):45-50. Available at <http://www.aafp.org/fpm/20000900/45same.html>. Accessed April 28, 2008.
- NHS Institute for Innovation and Improvement. Demand and Capacity – A Comprehensive Guide. 2008. Available at http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/demand_and_capacity_-_a_comprehensive_guide.html. Accessed on July 30, 2015.

Support in Implementing Open Access

For help in implementing this strategy, contact:

- The Institute for HealthCare Improvement (IHI)
Phone: (617) 301-4800; Toll-Free: (866) 787-0831
<http://www.ihl.org>
- The Institute for Clinical Systems Improvement (ICSI)
Phone: (952) 814-7060
<http://www.icsi.org>

For federally qualified community health centers and other primary care practices:

- Bureau of Primary Health Care (<http://bphc.hrsa.gov/>)
- Primary Care Development Corporation (PCDC) of New York City (<http://www.pcdcnyc.org>)