

S. Mark McNeill, MD

Lower Your Overhead With a Patient Portal

Patients connecting with your practice through the Internet require fewer staff and generate lower costs.

It is not news that electronic health records (EHRs) are a major cause of job dissatisfaction among physicians.¹ Advances in patient portal technology over the past few years, however, have opened numerous opportunities for health information technology to actually improve your office and your job satisfaction. Patient portals, when implemented well, can increase workplace efficiency and reduce practice costs.

When I decided to leave my traditional group practice three years ago and open a solo office, I centered

my workflow communication around the patient portal instead of the telephone. The majority of my patients followed me to the new office and have enthusiastically adopted this model. My patient satisfaction scores have never been higher. In addition, my staffing needs have been cut in half; I require only a medical assistant and an office manager to operate my practice. With the reduced overhead, I can maintain the same income while seeing seven to eight fewer patients per day.

Making full use of the patient portal – including

automated scheduling, secure patient messaging, and patient engagement – has transformed my practice. The approach I've taken can be emulated by practices of all sizes.

Automated electronic scheduling

Many patients already make restaurant and airline reservations online, and patient portals are increasingly giving them the ability to schedule their own visits. Some portals limit patients to only requesting an appointment. This is quicker than a phone call, but



About the Author

Dr. McNeill is a family physician and owner of Trillium Family Medicine in Asheville, N.C. He would like to thank John Bachman, MD, Allen Wenner, MD, and Robert Geist, MD, for their guidance in improving this article, and Sue Stigleman for her research assistance.

Author disclosure: no relevant financial affiliation disclosed.

it still requires staff to complete the task. Successfully implementing more advanced portals with full scheduling features can significantly increase efficiency.

My practice uses eClinicalWorks, which we chose after much testing because it is organized in a simple, straightforward way that makes sense to most of our patients. Other products that allow self-scheduling include Epic, athenahealth, e-MDs, and Centricity, as well as third-party portals like Medfusion and Updox, among others.

Virtually all of our patients are expected to schedule their own appointments, a requirement we set from the beginning. Once new patients complete the online registration, we contact them by e-mail with instructions for how to log on to the portal and select their first office visit. Should they have difficulty, we provide assistance by e-mail or phone. The vast majority of our patients require little or no assistance when setting up their first appointment and are quite excited upon arrival at our office that they were able to do so. This would be an easy first step for other practices to take: Ask new patients to enroll and schedule through your portal.

During the patient's first appointment, the medical assistant sets aside 10 minutes to explain the system and make sure the patient is comfortable making future appointments through the portal. I also make a point at the end of this first visit to personally encourage the patient to use the portal and its self-scheduling features, explaining how using the patient portal increases my availability and time for them. When patients hear this

strong endorsement from their doctor and the reasons behind it, most will at least give it a try.²

The next step is making sure patients have a positive experience when they schedule an appointment. We do this by simplifying our scheduling process and offering plenty of same-day and next-day appointments. At my previous group practice, each physician was allowed to customize his or her scheduling templates. With five physicians in the office, each having different expectations and demands, the schedule was almost byzantine in its complexity. My current practice offers only 20-minute office visits through the portal. Patients pick what appointment time best meets their needs. Our system does allow us to offer different types of visits, such as physicals, and limit how many of each type are available per session. But we do not use these features in favor of simplicity for our patients. Fewer choices mean less confusion and higher adoption.

The challenge to this approach is making sure patients have enough time. A 20-minute appointment is truly insufficient for physicals, many office-based procedures, and providing care to patients with complicated concerns. My practice manager addresses these challenges by reviewing patient appointments throughout the day and allocating more time for those who may need it. The entire health care team at my practice also reviews the schedule at our daily morning meeting and expands the time for a patient deemed to need more of it or blocks out catch-up time later in the day. Ultimately, I spend more than 25 minutes with each patient, which is considerably longer than the national average of 16 minutes.³

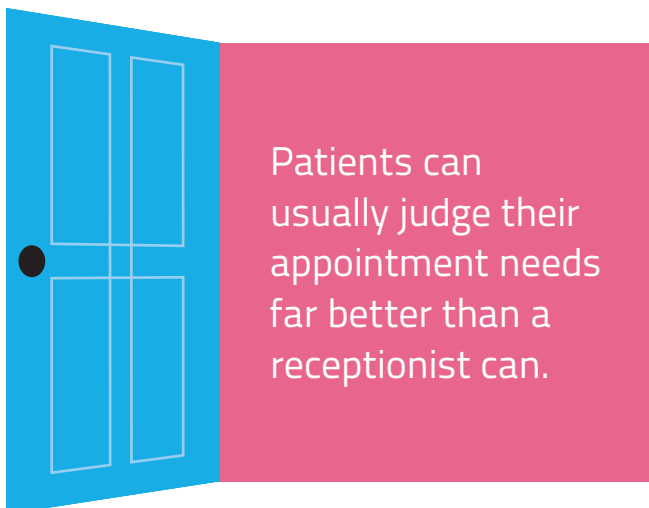
We can guarantee same-day appointments by offering 20 appointments daily. To determine this number, we took our average of 12 patient visits a day plus two standard deviations above that (six additional visits a day), and then we added two more slots to give us additional flexibility. Statistically, we will meet our daily patient demand 97.5 percent of the time.

Meeting daily appointment demand is important because if patients log on to the portal for the first time and do not find an appointment that meets their needs, they quickly lose trust, get frustrated, and pick up the phone instead. If they find an appoint-

■ Patients can schedule their own appointments through the patient portal.

■ Physicians who require patients to use the portal must provide adequate support and guidance.

■ The online scheduling process should be simple and provide plenty of appointment times.



ment that meets their needs, they usually are instant converts to the new system.

To enforce self-scheduling, we do not offer appointments by phone for most patients. We do welcome walk-in appointments if the portal does not meet a patient's needs. Also, if a patient is significantly disabled or lacks Internet access, we provide a special telephone number to reach staff who can schedule appointments in the traditional manner.

This approach has resulted in 75 percent of our appointments being scheduled online. It has also drastically reduced my after-hours calls to less than four per month because patients can book an appointment when they are up in the middle of the night worrying and then go back to sleep.

Self-scheduling can produce its own problems, such as five patients scheduling physicals in the same afternoon or a patient inappropriately booking a visit for chest pain three days in the future. Complications such as these are rare, but when they occur my practice manager will contact patients to reschedule them for a time slot that works better or is more clinically appropriate.

This back-end management of patient-centric scheduling may seem just as burdensome as traditional phone scheduling. But the reality is patients can usually judge their appointment needs far better than a receptionist can. Complications are infrequent and easily managed, requiring far less time and overhead than hiring a scheduler and relying on traditional phone-based scheduling.

Group practices with higher patient volumes may look at this approach as daunting. However, switching as little as 10 percent or 20 percent of patients to online scheduling can significantly reduce phone call volume and generate additional practice efficiency. The principles of good patient training and a commitment to providing a positive patient portal experience will result in changed patient behavior regardless of clinic size.

Secure messaging

Besides scheduling, a significant amount of phone call volume at most practices involves patients asking about test results, medication refills, and other concerns. Handling these inquiries by phone requires staff and physicians to answer calls in real time, which can be

inefficient. To reduce the time spent on the phone for these concerns, we moved most of our communication with patients to secure messaging through the portal.

We train and expect patients to use the portal to obtain clinical advice, medication refills, and retrieve test results. We limit phone calls to high-risk issues such as communicating abnormal test results or bad news or to the small number of patients without Internet access. This dramatically reduces phone call volume, and communication tasks are sorted and completed in a fraction of the time. This allows my staff to spend more time taking care of patients who are in the office and better supports my efforts during the workday.

As with self-scheduling, we spend part of a patient's first visit showing how secure messaging works and providing strong physician endorsement. Our goal is to respond to all patient messages through the portal in two hours or less, and patients appreciate having this level of access and service. All messages go to my inbox first, and it is my responsibility to respond. With a panel of 1,000 patients, I usually receive between five and 15 messages a day. Most are straightforward, clinically safe to handle via messaging, and take no more than one or two minutes. If a patient's inquiry involves a complex issue and requires more time, or if my response leads to more questions from the patient that cannot be handled easily online, we simply ask the patient to come in for an appointment to discuss further.

We also do not hesitate to train patients about boundaries. If patients are being overly verbose or using the patient portal in an inappropriate manner, then we re-explain our expectations about proper use and the behavior generally changes. Some patients will continue to call instead of messaging. We usually respond to them through the portal and remind them to use the portal for future inquiries.

Problems can also occur if patients fail to read their portal messages. But evidence shows that 97 percent of messages sent through a mature patient portal are read by their recipients in a timely manner.⁴ Compare that with the number of phone calls you make that are never acknowledged, and you will see that secure messaging is an arguably safer way to provide information of low to moderate risk

■ Self-scheduling reduces after-hours calls as patients can make appointments at any time.

■ Secure messaging allows physicians to communicate test results and other routine information without a phone call.

■ Patients need to be trained to use secure messaging and warned about inappropriate use.

to patients with Internet access.

We also encourage portal use by not doing refills by phone. Patients can use the portal to request a refill, which is routed to my medical assistant, or they can contact their pharmacy, which will electronically request the refill. This can be another good starting point for offices trying to increase portal interaction, as well as a good way to dramatically improve office flow. (See “Annual portal activity for 1,000 patients.”)

By using the portal for scheduling and secure messaging, we conservatively estimate that we save at least 10,000 phone calls annually.

Patient engagement

Many offices ask patients to fill out a history form as part of the paperwork they complete in the office. Staff then have to collect and enter the data. But what if patients could do this themselves? Most portals make this process easier by providing access to questionnaires that can be completed online by the patient prior to the visit.

We use patient interview software called Instant Medical History (IMH), which can interface with numerous EHRs and portals and has been reviewed extensively in the medical literature.⁵ The software generates a questionnaire personalized for each patient and creates a history comparable in sophistication and accuracy to that produced by third-year medical students.

In our practice, the software is embedded in the patient portal and loads the data into the EHR. Every patient with portal access is trained to use IMH, and we remind patients by e-mail 24 hours before their visit to log in to complete the interview. Those who do not are given the opportunity to complete the

interview in the exam room before being seen. Approximately 70 percent of our patients complete the IMH interview before their appointments.

IMH improves our office efficiency and patient engagement in several ways. First, it helps patients organize their thoughts and express their concerns prior to being seen. By the time I enter the room, patients are more focused on what they want to talk about. Second, it allows for a more productive morning staff meeting, as we can look over the IMH output for patients scheduled that day and provide individualized care based on what they have told us. Third, documentation is made much easier because the patient’s IMH output populates the subjective elements of the progress note.

More than two-thirds of the word count in a patient record is related to the patient history. Having this information already gathered means I do not have to interview the patient and type at the same time. Instead, I can maintain full eye contact with the patient as I review his or her information, which increases patient satisfaction. After the visit, I have less documentation to complete. These features allow me to comfortably meet the needs of my patients with only one medical assistant and negate any need for a medical scribe or transcriptionist. In addition, any time saved is money saved.

A word about electronic visits: I do offer online consults, usually for simple acute complaints that can be safely handled without a face-to-face visit, such as urinary tract infections, poison ivy, or colds. Only one insurance carrier in our market will pay for them, so we generally bill patients a \$35 fee. We ask our patients to complete a portal interview regarding their chief complaint, and I respond with my care recommendations within two business hours. Demand is not that high; I provide only one or two a month. Electronic visits may be more helpful in busy offices with access problems, but our patient-centric, portal-based workflow increases availability significantly.

The digital divide

Our patient panel is not just young, tech-savvy individuals. More than a third of our patients are served by Medicare or adult

■ Patients can use the portal to request medication refills, removing a significant source of office calls.

■ Patients can fill out history and other paperwork online ahead of the visit, which contributes to a more productive visit.

■ Physicians can offer online consults for simple acute complaints, freeing up time for visits.

ANNUAL PORTAL ACTIVITY FOR 1,000 PATIENTS

Appointment reminders	5,000
Appointments scheduled via the portal	75%
Average messages sent by patients	2,000
Average messages sent by staff/physician	5,000
Lab results published	1,600
Refills requested	1,500

Medicaid. Although some studies raise concerns that patient portals expand health disparities among certain populations,⁶ our experience has been the opposite. Of the roughly 20 percent of my patients who do not use the portal, many frequently face socioeconomic challenges and need high-complexity medical care. It was difficult for me to give these patients the time they deserved when I was in a traditional office. Now, with our usage of the portal allowing me to see fewer patients during the day, my high-risk patients receive more time and attention than ever before. Patients who are not technologically savvy still benefit from the patient portal indirectly, and there is room for them in a portal-based office.

When it all comes together

If you were to spend time in my office, you would notice that the phones ring much less than in a typical office, my staff serve patients without being constantly interrupted, and access issues are minimal. With a reduced panel size, it is rare that we cannot easily accommodate same-day urgent visits or walk-ins.

Patients rarely report feeling rushed, an atmosphere created in large part by the portal's improvements to our workflow. Ninety-five percent of patients in my last three annual surveys said they were highly likely to recommend my office to family or friends. This is the highest satisfaction rate of my career.

My lifestyle has improved dramatically. I work fewer hours than when I was in a traditional group practice, but my income has remained stable and regionally competitive at 80 percent of the national average for a family physician.⁷ If I wanted to scale up to meet the national average, I would need to see an additional two patients per day.

The patient portal can be your most efficient employee if you appropriately leverage its potential. Diverting any percentage of activity from the telephone to the portal can help family medicine offices of all sizes see the same efficiency gains that so many other industries have seen in recent decades by



adopting technology.

This is primary care in the 21st century. It is amazing what has happened to my patients. What is more amazing is what is happening to me. I am living my dream of being the family doctor I wanted to be – a compassionate clinician who cares deeply about patients and has time to give them the care they deserve. It is a pleasure to go to work every day. I hope my experience will inspire you to consider portal-based upgrades to your workflow as well. **FPM**

1. Friedberg MW, Chen PG, Van Busum KR, et al. *Factors Affecting Physician Professional Satisfaction and Their Implications for Patient Care, Health Systems, and Health Policy*. Santa Monica, CA: RAND Corporation; 2013.
2. Irizarry T, DeVito DA, Curran CR. Patient portals and patient engagement: a state of the science review. *J Med Internet Res*. 2015;17(6):e148.
3. Tai-Seale M, McGuire TG, Zhang W. Time allocation in primary care office visits. *Health Serv Res*. 2007;42(5):1871-1894.
4. Crotty BH, Mostaghimi A, O'Brien J, Bajracharya A, Safran C, Landon BE. Prevalence and risk profile of unread messages to patients in a patient web portal. *Appl Clin Inform*. 2015;6(2):375-382.
5. Bachman J. Improving care with an automated patient history. *Fam Pract Manag*. 2007;14(7):39-43.
6. Smith SG, O'Connor R, Aitken W, Curtis LM, Wolf MS, Goel MS. Disparities in registration and use of an online patient portal among older adults: findings from the LitCog cohort. *J Am Med Inform Assoc*. 2015;22(4):888-895.
7. Peckham C. Medscape Physician Compensation Report 2015. Published April 21, 2015. Accessed Oct. 27, 2015. <http://www.medscape.com/features/slideshow/compensation/2015/public/overview>.

Physicians have more time for longer visits with patients with complex medical issues because of the time saved by the portal.

Portal use can boost patient satisfaction.

Having the portal replace routine office tasks can reduce overhead and time in the office.

Send comments to fpm@afp.org, or add your comments to the article at <http://www.aafp.org/fpm/2016/0300/p21.html>.