



# Patient Portals in the Safety Net

## Phase 2: Implementation

### Patient Portal Series

A patient portal is an online tool that gives patients direct access to their electronically stored health information. It can streamline administrative functions and increase communication between patients and their care team. In launching their patient portals, health centers follow a path similar to the introduction of many other technologies:



This paper is the second in a series — organized by the phases of assessment and planning, implementation, and optimization, which are illustrated above — that documents the experiences, lessons learned, and tools used by three community health centers in their participation in the Patient Portal Initiative (PPI):

- Open Door Community Health Centers (Open Door), Humboldt and Del Norte Counties, California
- Shasta Community Health Center (Shasta), Redding, California
- West County Health Centers (West County), Sonoma County, California

These papers and the tools gathered on the initiative's website ([www.chcf.org/patient-portals](http://www.chcf.org/patient-portals)) are intended to serve as a resource for other safety-net providers to use and tailor to their specific needs. The experiences of the PPI grantees provide context and guidance for planning, launching, and optimizing a patient portal in a safety-net environment.

### Introduction

Implementation of a patient portal is comprised of several intertwined components: marketing, enrollment, training, support, and workflow redesign. Although these topics will be discussed separately, the implementation strategy, marketing tactics, and enrollment efforts are difficult to separate, as strategy drives rollout methodology and tactics.

The PPI grantees each took different approaches to implementation that included core functions and unique custom features, providing a rich set of experiences from which to evaluate and learn different ways to launch a patient portal.

### Implementation Strategy: Patients, Providers, and Pilot Projects

Implementation of a patient portal is largely about introducing an innovative technology and managing the change process that follows to minimize disruption and accelerate acceptance of the innovation. PPI grantees managed this change process by starting with a subset of patients or providers and staff. Each approach to portal implementation took into consideration the resources, culture, and priorities of the organization. Table 1 summarizes the different implementation approaches, and the benefits and challenges of each.

**Table 1. Implementation Approaches of PPI Grantees**

DESCRIPTION	BENEFITS	CHALLENGES
<b>Provider-Controlled</b>		
<p><b>Open Door</b> piloted a patient portal project at five sites with seven providers; all volunteered and were given control over which patients were offered portal access. Providers, medical assistants, and registered nurses (RNs) reviewed the day’s patients and selected those to target for enrollment. Next, all interested providers were enabled to use the portal in the same way. Finally, all 50 providers at all sites were required to use the portal and to promote it directly with patients.</p>	<ul style="list-style-type: none"> <li>• Provider resistance was diminished by giving providers initial control over patients and volume.</li> <li>• A base of provider champions and success stories was built to credibly encourage more reluctant adopters.</li> </ul>	<ul style="list-style-type: none"> <li>• Patients often saw providers other than their primary care provider. Inconsistent use of the portal confused patients as to what access they would have to their medical information from one provider to the next.</li> <li>• In addition to provider support, more emphasis on staff empowerment would have allowed for a broader marketing strategy to patients.</li> </ul>
<b>Team-Focused</b>		
<p><b>West County</b> included patients on their patient portal rollout team. An initial year-long pilot involving one provider and five patients at one health center site allowed for incorporation of feedback and perceptions into the final process. Additional providers were added to the team at this site as they showed interest. Once all of these providers were fully on board and all patients at that site could enroll, the patient portal was offered to other clinical sites. Because of many competing priorities, each health center’s leadership team determined when to adopt the portal.</p>	<ul style="list-style-type: none"> <li>• Initial test group of patients in the year-long pilot provided valuable usability feedback.</li> <li>• Intentionally slow rollout at pilot site ensured that providers had buy-in before moving forward, everyone understood their roles, and all voices were heard.</li> <li>• Empowering site leadership to determine the pace of change and portal adoption lead to a more sustainable and scalable implementation.</li> </ul>	<ul style="list-style-type: none"> <li>• A long and unspecific time period for pilot and rollout risks loss of momentum and stalled implementation.</li> </ul>
<b>Efficiency-Driven</b>		
<p><b>Shasta’s</b> initial idea was to target populations of patients most likely to receive the greatest value from the patient portal and, therefore, more likely to use it. Shasta quickly learned that it would be more effective to open enrollment to their entire patient population to achieve critical mass and realize the greatest operational efficiencies. No patient messages went directly to providers; triage RNs and other care team members fielded all communications and requests. Initial deployment focused on acceptance and use by support staff.</p>	<ul style="list-style-type: none"> <li>• Providers were shielded from the portal messages and the perceived extra work that they might bring. Workflow was leveraged by Shasta’s high RN-to-provider ratio (one nurse for every two providers).</li> <li>• RNs and visit coordinators better managed their time as asynchronous communications allowed for more flexibility in responding to nonurgent requests.</li> <li>• Policies and procedures were solidified before engaging providers directly in portal use so that they were not exposed to workflow inefficiencies or technical problems.</li> </ul>	<ul style="list-style-type: none"> <li>• Since engaged providers are the best “marketers” of the portal to their patients, without provider participation, this approach places a greater burden on staff to promote the portal’s benefits.</li> <li>• Some workflow processes were redundant as communications from patients were first routed to an RN and then to a provider.</li> </ul>

## Marketing and Enrollment

Communicating the value of a patient portal to safety-net patients is an essential ingredient in gaining their buy-in and enticing them to sign up for and use the portal. A formal marketing strategy and plan is ideal, but the unifying vision established in the planning phase can be used to craft a marketing message. PPI grantees used a range of marketing techniques and materials to educate patients about the value of using a portal and to encourage them to enroll. Grantee health centers were also careful to monitor the progression from outreach to enrollment to actual use so that the effectiveness of their efforts could be measured.

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*“If you want a patient to use the portal, help them answer the question: ‘Why am I using this?’ Relate to the patient in ways that feel more personal — in ways that help them to feel like engaging in the portal.”*

— PATIENT FROM WEST COUNTY HEALTH CENTER'S  
PATIENT ADVISORY GROUP

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West County's provider champion, Dr. Jason Cunningham, identified what he described as three groups of potential users:

1. Super users (those who are technology savvy and value the convenience of electronic communications)
2. Users who need help (those who with some hand-holding would use the portal)
3. Patients who will never use (those who consider the portal too difficult, have no interest in using)

Most grantees had little data on patient demographics or other characteristics to help them prospectively place patients into user groups, but they are now learning retrospectively from the usage data they have accumulated. As a barometer for the high end of participation, Kaiser Permanente, which has one of the most expansive patient portal deployments in the nation, reports that 53.3% (218,456) of eligible members in its Northwest region were registered patient portal users.<sup>1</sup> These data can help health centers set realistic targets for portal participation.

After the initial pilot effort, grantees used a variety of marketing materials — posters, pamphlets, buttons, slide shows, and videos on monitors in the waiting room — in addition to direct staff or provider outreach to promote the portals to patients. Samples of these marketing materials are available at [www.chcf.org/patient-portals/implementation](http://www.chcf.org/patient-portals/implementation).

Besides effective marketing, well-crafted enrollment efforts are a key step to the successful rollout of a patient portal. Each health center who participated in the PPI approached patient portal enrollment slightly differently. Examples of enrollment efforts include:

**Patients drive the process.** West County initially staffed their enrollment effort with a volunteer from AmeriCorps, the federal community service program. The enrollment process was eventually changed from being volunteer-led to staff-led. Feedback from the patient advisory group confirmed West County's realization that the process's long-term sustainability would depend on the integration of enrollment into current staff workflow.

West County now relies on health center support staff for enrollment, finding that this process has been more effective than motivating providers to encourage patient enrollment. Patients, in turn, motivate the providers by using the “Message My Doctor” function since providers generally want to meet the expectations of their

patients and will seek out training to return the patient's communication.

West County also organized a competition between care teams to sign patients up for the portal. The competition proved to be effective in elevating the priority of the portal in light of care teams' heavy workloads and competing priorities.

**Tote bag giveaway boosts enrollment.** Shasta enlisted the help of three summer interns to jump start their portal registration and enrollment process. They developed posters and buttons and promoted the portal through in-lobby slide shows. Shasta feared losing momentum at the end of the internship period and promoted a visit coordinator with excellent customer service skills to become the portal coordinator. Outfitted with a laptop, a printer, a cell phone, and a mobile cart, the portal coordinator has a dedicated space in front of the Family Practice and Pediatric departments. Being physically located where the patients are, the portal coordinator has been very effective in facilitating patient enrollment. The support staff help seed the process by wearing buttons advertising the patient portal and by asking patients if they've heard about the portal. Staff steer interested patients to the portal coordinator. Patients who register for the portal but have not yet used the service receive an email from Shasta encouraging them to do so.

Shasta's enrollment process received an unexpected boost when a local merchant donated more than 100 canvas tote bags to the health center. The bags were offered as a gift to those who enrolled in the portal. "Never underestimate the power of giveaways as incentives!" remarked Shasta's CEO Dean Germano.

**Friendly competition produces results.** Open Door's enrollment process relied heavily on providers' encouragement to patients since providers were responsible for "opening the electronic door" to a

patient's medical information once that patient had enrolled. As the enrollment process matured and all providers were activated on the portal, Open Door promoted the concept of touch points: Everyone with whom the patient comes in contact is able to market the portal in some way. After saturating the health centers with posters and fliers about the patient portal, a March Madness competition for patient enrollment, nicknamed after the college basketball championship, was developed. Open Door's portal manager posted enrollment statistics, which were fashioned into dashboards or thermometers, for motivation. The competition between health centers and, in some cases, intra-health center between pods, greatly stimulated enrollment.

One cautionary tale from the experience is that the focus on sign-up and competition for enrollment might mean less time spent with the patient emphasizing the value and utility of the portal. While total enrollment soared during Open Door's March Madness contest, the percentage of active users decreased. Post-competition, the portal manager continued to send weekly enrollment and usage reports to each clinical site to remind health center coordinators and managers about the importance of ongoing portal use. As a result of these reminders, the percentage of active users at Open Door eventually rose above pre-competition levels.

### **Technology, Training, and Support**

Introducing a new technology tool that will be used by patients, providers, care teams, and other health center staff raises the issues of training and ongoing support for each type of user. The patient portal implementation team must devise ways to address these needs efficiently and effectively from the outset, since first impressions and experiences have lasting impact.

**Portal training for patients.** Portal training for patients can take several forms. Many health centers use marketing materials (e.g., posters, fliers, waiting room videos, and slide shows) to communicate to patients the value of

the portal and its specific features and functions. These materials educate patients about relevant portal functions, such as requesting or scheduling an appointment, requesting a medication refill, or looking up lab results. Brochures and other takeaways that include portal screenshots and login instructions can be used by patients to learn how to use the portal.

In-person training often occurs during the enrollment process. In some health centers, the enrollment team or patient portal coordinator provides a tutorial on the spot, or registers the patient with a temporary password. In this way, the patient can see the login screen and have access before they left the health center. Shasta's mobile portal coordinator is an example of this technique: She trained patients on the portal as she enrolled them.

Health centers also train patients on appropriate use of the portal, as in the case of a medical emergency versus a nonurgent request. A more sensitive issue is the appropriate use of the messaging feature. Providers expressed concerns about patients sending lengthy, off-topic, or overly personal messages. In reality, this occurred infrequently among the PPI grantees' patient portal users.

For example, Open Door addressed the topic of inappropriate use of the patient portal proactively. They asked their patient advisory group to comment on and edit a letter advising patients on inappropriate portal use. This letter is included in the portal introduction package that is given to patients when they enroll.

Ongoing technical support is an important feature of patient engagement and use of the portal. Centralizing support calls to one department or staff member allows for tracking of support needs and trends. Like most online applications, the vast majority of calls are for forgotten logins or passwords.

Shasta found that after deploying a self-service password recovery feature, support call volume diminished overall and can now be easily fielded by the patient portal coordinator.

West County considered organizing a monthly drop-in class for users to learn more about the patient portal's capabilities in order to offload this responsibility from the front office staff. Oftentimes, patients have basic computer literacy issues that need to be addressed in the context of portal use. PPI grantees' experiences demonstrate that the implementation team should be prepared with tactics, workflow, and clear accountability for fielding portal support calls from patients. In addition, West County recommends a regular quality assurance check to ensure that the portal is working properly. In their case, a computer problem went undetected by West County staff and rendered their portal inoperable for a period of time.

**Training for providers and staff.** Training providers and staff on patient portal operation is largely focused on how to integrate the receipt and response to patient messages, such as appointment requests, medication refill requests, and messages to providers and care teams, into the daily workflow. Patient use of the portal seemed in all cases to grow at a manageable rate, making it much easier to integrate its use into existing workflow.

Workflow diagrams can aid staff in identifying areas where messages may be at risk for falling through the cracks. A comprehensive diagram from Open Door that illustrates how the portal is integrated into front desk, call center, medical assistant, nurse, and provider workflow is available at [www.chcf.org/patient-portals/implementation](http://www.chcf.org/patient-portals/implementation).

PPI grantees found that the portal use by providers followed similar patterns to their electronic health record (EHR) uptake. Providers and staff who were comfortable with technology were more open to using the portal. Thus, portal launch teams were able to identify in

advance those providers for whom extra support would be needed. For both providers and staff, a key motivator that can be presented in training is to show how portal use can save time. Answering messages when it is convenient for an RN, visit coordinator, or provider — as long as it is within the time period established by organizational standards and policies — can enhance productivity, create a sense of control and empowerment over a chaotic day, and enhance patient satisfaction.

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*“The normal workflow would be a person calling in, reaching the operator, being transferred to a visit coordinator, and then possibly to a triage nurse, or clinician’s nurse who would consult the clinician. Through the portal, the appointment requests go directly to a visit coordinator and the medication requests/emails go to the triage nurses. I think this is a positive change. It cuts down on the incoming calls to the operators and visit coordinators. The only negative feedback that I have heard from the staff is that it is one more thing to remember to check. However, it is not hard to get into the habit.”*

— CHARLES KITZMAN, CIO, SHASTA

For example, Shasta considers consistent, comprehensive portal training for every staff member to be critical to success. Training ensures that everyone is on the same page regardless of the depth of individual use. Further, they recommend incorporating portal training into their employee manual.

Initial training for providers, care teams, and staff offers an opportunity to instill organizational standards for response time to patient messages and other performance metrics, as well as to designate responsibility for tracking and reporting.

### **Ongoing Support and Management**

Management of the patient portal and workflow issues that arise from its use must be a continuous and ongoing activity. Maintaining patients’ trust, confidence, and value perception in the portal is essential for deeper and consistent use. Specific PPI grantee experiences in managing portal workflow issues include:

- Shasta and Open Door have patient portal oversight teams that are multidisciplinary, have representation from each site, and meet weekly.
- West County uses the existing senior leadership team at each site to provide oversight; this function is integrated into their larger focus on patient experience and managed by Jeremy Robenolt, West County’s associate director of customer service. Robenolt advocates being a portal user to understand the health center’s portal. “Many West County staff members are also patients,” said Robenolt. “This provides an excellent opportunity to understand the experience from both sides. Quality assurance and maintenance are very important; a technology glitch that went undetected for too long reminded us that we need to be proactive to ensure that all connections, links, etc., are current, active, and maintained.”



- After deploying the portal at their first site, West County developed a robust training outline, which includes a Go-Guide for site management training and staff rollout. The Go-Guide includes training for super users and role-specific training to allow managers to mentor their staff.

## Features and Functions

Nearly all patient portals offer a similar set of features and functions; however, the way in which they are offered and the ease of their use can vary greatly. Patient portals are add-on modules to EHR systems and are rarely included among a health center’s “mission critical” requirements for an EHR. The features and functions of a portal are seldom explored in detail during the sales cycle, and portal limitations or deficiencies are often not discovered until implementation. Also, since providers are paying for or selecting the system, portals are often designed from their point of view rather than from the patient’s. This can impact the ease of use, features offered, and even technical requirements for patient access.

The PPI grantees — each using a different EHR system and portal — explored the strengths and weaknesses of each other’s portals. They implemented many of the same core functions, although some health centers piloted unique custom features, and each made requests to their portal vendors to implement enhancements and correct deficiencies.

**Appointment request.** “Appointment Request” is a popular feature for patients and health center staff. While the functionality exists for a patient to book an appointment, none of the grantees enabled this function. Instead, patients make online appointment requests that are fulfilled by a member of the front office staff. This way, PPI grantees felt that they maintained greater control over their appointment calendar and more actively managed access to care. Patients appreciated the convenience of online appointment requests, which

eliminated the need to call during business hours, and potentially wait on hold for an answer.

**Messaging to provider.** “Messaging to Provider” is essentially a secure email function. Each of the grantees determined the best way to handle these messages, as they considered the impact on provider workflow, workload, and preferences.

- All patient messages are handled by RNs at Shasta and filtered for those that need provider input. The RNs coordinate with physicians to determine the appropriate disposition of the message.
- West County patient messages go to the whole care team; RNs can cherry-pick those that do not require physician input and the rest will be responded to by the provider as part of their clinical workflow.
- Open Door providers determine how they would like to manage their email messages from patients. Some providers choose to receive them directly, and others prefer a filter or triage.

**Medication refill request.** “Medication Refill Request” is typically a message type that can be tasked to an RN, if desired. Working according to protocol or standing orders, many refill requests can be handled by the RN, thus streamlining a high frequency clinical function. In most cases, a patient’s current medications are displayed on the patient’s portal page to make the refill request easier.

- Open Door and Shasta provide the refill request function through their patient portals.
- West County prefers that patients call the pharmacy for refills so that the pharmacist can generate a request directly into the EHR and the provider’s inbox.

**Lab results.** All of the portals used by PPI grantees allowed for display of lab results; however, the use of this feature presented challenges. There are many important policy and procedural considerations tied to this function, including: heavy demand from patients, patients' understanding of the results value, technical and medical jargon that may not be understood by the patient, laws on how quickly the results must be posted, rules about who can review and sign off on the results, and decisions about directing patients to educational sites that can explain what the results mean. In addition, patient portals often display not only the lab results themselves but also providers' comments and interoffice notes. All grantees expressed a desire to avoid generating unnecessary anxiety among their patients by displaying lab results without context. Depending on the functionality of each grantee's portal and on the policy of the health center, the following solutions for displaying lab results were devised:

- Open Door generally publishes lab results for patients as soon as they are reviewed by the provider. Providers also can post a patient message with the results, if necessary.
- West County publishes lab results automatically when reviewed by the provider unless the provider chooses to hide the results from the portal. They also developed a Frequently Asked Questions document to help patients interpret common lab values and provide a link to MedlinePlus, an online patient education service sponsored by the National Institutes of Health.
- Shasta's portal does not offer a view into the lab results module, but they will release lab results upon request via secure messaging.

**Other features and innovations.** To varying degrees, other features and services available and used by the PPI grantees include: updating of demographic information, access to health education information, patient reminders and alerts, bill paying, registration, and patient input of clinical data (that is, blood pressure, glucose level, etc.).

For example, West County offered patients the opportunity to fill out a questionnaire through the portal that helped set an agenda for the patient's visit. The questionnaire is processed by the care team's medical assistant and a screenshot is sent to the provider prior to the visit.

### Special Considerations: Minors' Access to Health Information

Both California law and Health Insurance Portability and Accountability Act (HIPAA) regulations contain provisions dealing with minors' rights to access their health information, and accompanying rights to privacy and confidentiality of that information (HIPAA largely defers to state law). In general, the person who has the right or obligation to consent for treatment purposes also holds the privacy rights with respect to the data. In other words, if minors have the right to seek and obtain treatment on their own, without parental consent, they hold the privacy rights with respect to data about that treatment.<sup>2</sup> To further complicate the matter, the age at which minors may consent for treatment on their own is based on the type of health service sought:

- Abortion — any age
- For drug- and alcohol-related problems — 12+ years of age, except for narcotic abuse replacement treatment
- Family planning funded by federal Title X — any age
- HIV/AIDS funded by federal Title X — any age; if not funded by Title X — 12+ years of age<sup>3</sup>



The complexities of evaluating specific types of confidential services, determining the individual data elements associated with these services, and extracting or protecting this information, have led to the exercise of great caution in granting portal access rights to minors. Health centers are advised to seek legal counsel when establishing their minor access policy.

PPI grantees took under advisement the examples set by other organizations with well-established patient portals, such as Kaiser Permanente in Northern California and the Institute for Family Health in New York City. Kaiser, for example, allows access for minors at age 13 but with limited services and information sharing (e.g., email, allergies, and immunizations). Examples of PPI grantee portal policies on minors' access to health information include:

- Open Door does not allow access for patients less than 18 years of age, due largely to limitations of their portal deployment.
- West County, also concerned about the proxy rights of parents versus the confidentially rights of minors, has simplified their policy to allow access at 18 years of age.
- Shasta's more nuanced policy allows parents and guardians to link the accounts of dependents 12 years of age and under. Shasta believes that new mothers and anxious parents constitute a large portion of their call volume. A query is run each month to identify children turning 13, and a notice is sent to the child's caregiver to let them know access to their child's electronic information will no longer be available. The minor is entitled to ask for portal access to nonsensitive medical information. Shasta reports that these requests have been minimal.

## Summary

With the benefit of hindsight and the help of the initiative's evaluator, the following lessons on successful portal implementation were captured through interviews with PPI grantees' staff:

- Market the patient portal to and train the entire staff (not just providers, as staff buy-in is important).
- Provide patient education and involve a patient advisory group from the start.
- Recognize that the process is evolutionary and does not require 100% provider buy-in.
- Involve clinicians early in the process.
- Consider competing priorities since it will always take more work than initially expected.

Many moving and interlocking components make up a successful patient portal implementation. These include establishing a clear pilot and rollout strategy, effective marketing, robust training, and support processes for both patients and health center personnel, and a thorough understanding of the portal's capabilities as they impact workflow.

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## ENDNOTES

1. Marianne Turley et al., “Association Between Personal Health Record Enrollment and Patient Loyalty,” *American Journal of Managed Care* 18, no. 7 (2012): e248–e253, [www.ajmc.com](http://www.ajmc.com).
2. Deven McGraw, “Patient Portals — Considerations for Minors” (presentation to Patient Portal Initiative grantees, September 22, 2011).
3. Ibid.