

Provider Perspectives on the Use of an English/Spanish Online Patient Portal in an Urban Underserved, Predominantly Spanish-Speaking Patient Population

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Abstract

Background

In order to remain eligible for the Medicare and Medicaid Electronic Health Record (EHR) Incentive Programs, Stage 2 Meaningful use requirements mandate that all eligible professionals (EPs) must implement an online patient portal (PP) with at least 5% of all patients are enrolled. Studies have demonstrated that provider endorsement has been shown to impact patient portal adoption rates.

Objective

To compare patient and provider perspectives on the utilization of a bilingual English/Spanish patient portal in a predominantly Spanish-speaking safety net population.

Methods

A total of 400 primary care patients and 59 providers completed a survey administered during a face-to-face interview. The cross-sectional survey was conducted during July 2014 at AltaMed Health Services, a large, multi-site community health center with locations in Los Angeles and Orange County.

Results

Preliminary analysis of survey data demonstrates that although 74.1% of providers believe the patient portal will increase patient satisfaction, only 39.7% of providers report being likely or very likely to recommend portal use to patients. Also, patients are more likely to believe that portal use will strengthen the patient-provider relationship than providers (71.8% vs. 37.9%, $p < 0.05$).

Conclusion

Although providers generally believe that portal use is beneficial to patients, providers are hesitant to endorse portal adoption due to concerns related to increased workload and reimbursement issues.

Keywords: patient portal, personal health record (PHR), electronic patient-provider communication

Introduction

As healthcare coverage continues to expand under the fulfillment of the Patient Protection and Affordable Care Act (PPACA), a growing number of patients will access primary care services, and a portion of these newly-insured patients will choose to do so at federally qualified health centers (FQHC) nationwide, though it will be by choice, and not as a last resort. Thus, in order to help transition from a provider of last resort to a provider of choice, many FQHCs will find themselves in a position where they must compete with other healthcare organizations that have become fierce competitors because of their emphasis on patient satisfaction and customer service rather than solely focusing on budgeting for practicing financially sound medicine. One key step in this transformation into a healthcare organization that can compete in the larger market is the meaningful use of electronic health records (EHRs) to improve clinic efficiency and disease management. Additionally, a key feature of the EHR that can help improve patient satisfaction is the implementation of an online patient portal that allows patients to play a more central role in the management of their care by accessing laboratory results, scheduling appointments, and directly communicating with their providers through secure messaging.

Background

On September 4, 2012, the Centers for Medicare & Medicaid Services (CMS) released the Stage 2 Meaningful Use Requirements that all eligible professionals (EPs), eligible hospitals, and critical access hospitals (CAHs) must demonstrate in order to maintain their qualification for the Medicare and Medicaid Electronic Health Record (EHR) Incentive Programs.¹ Among the criteria outlined by CMS, EPs and CAHs must demonstrate that 5% of all patients enroll in the patient portal and must send at least one secure message to their healthcare provider within the

reporting period.² In 2004, Kaiser Permanente, the country's largest not-for-profit integrated health delivery system, implemented their institution's online patient portal, My Health Manager.³ In 2012, over 13 million secure messages were sent to healthcare providers by the 4 million enrolled patients within Kaiser's total 9 million members.⁴ On the other hand, it has been reported that only about one-fifth of veteran patients use My HealthVet, the PHR implemented by the US Department of Veteran Affairs (VA).⁵

Although patients are the ultimate end-users, understanding the healthcare provider's perspective on the adoption and impact of the online PP is essential to its successful implementation.⁶ Unfortunately, little is known in regards to providers' perspectives on the patient portal with respect to its utility and influence on the quality of patient-provider communication.⁶⁻⁸ Previous work has shown that providers not only utilize the secure messaging function within patient portals to communicate with their patients, but they actually endorse both patient and fellow provider use.^{6,9}

Studies have been conducted where providers have identified various benefits associated with the use of secure messaging, one of which being the fact that it directly addresses the issue of the limited amount of time allotted for face-to-face patient encounters by introducing a new direct line of communication with the provider.¹⁰ This direct, unadulterated line of communication between patient and provider also prevents filtering and potential misinterpretation of the patient's message, which has been cited as causing up to 40% of medical errors, and avoiding such miscommunication leads to more optimal health outcomes and increased patient satisfaction.^{11,12} In addition, the increased frequency of communication fostered by the convenience of secure messaging allows for providers to establish a stronger

patient-provider relationship while also reducing the threshold at which patients choose to reach out to their provider.

Although many providers reported being concerned about having to carve out too much time to replying to patient messages, studies have shown that secure messaging increases provider productivity, with the asynchronous messaging affording providers the opportunity to reply at their convenience while still being cognizant of time-sensitive messaging issues.^{6,10} Providers also saw a great benefit to being able to save the secure messaging thread within the EHR, thereby providing them with permanent access to the patient's exact wording of their message.⁶

From the clinical workflow standpoint, providers also appreciated the improved connectivity and increased proficiency of communication offered by secure messaging that was also shown to reduce the incidence of "telephone tag" and help improve clinic efficiency.^{6,13,14} Furthermore, secure messaging has also been associated with a reduction of clinical visits and phone calls, and increased productivity, as replying to messages requires less time than phone calls or face-to-face appointments.^{10,11,15-17} In fact, one study demonstrated that secure messaging reduced office visits by one visit per patient per year on average.¹⁸

At the same time, however, providers have also voiced concerns over the use of secure messaging, highlighting the possibility that patients will inundate providers with messages regarding trivial issues, resulting in reduced amount of time dedicated to face-to-face encounters.¹⁶ Providers also expressed concerns regarding secure message content being inappropriately sensitive or complex that would better be addressed face-to-face.¹⁹ Also, because communicating via secure messaging is still a relatively new clinical tool, concerns surrounding reimbursement issues has also been cited, with many insurers not compensating

providers for time spent replying to secure messages.^{16,18} Providers were also hesitant to use patient portal for communication due to issues related to privacy, security, and confidentiality.²⁰⁻

²² In spite of all of these provider-identified barriers to use, previous studies have also highlighted the impact of provider endorsement on patient adoption of patient portals, with patients being more motivated to utilize this online tool if providers recommend their use.^{6,23}

However, a knowledge gap in the literature exists when it comes to assessing providers' perspectives on the effectiveness and potential utilization of a Spanish-language patient portal within the setting of a large safety net provider serving under-resourced, predominantly Spanish-speaking patients.¹⁴ The aim of our study is to identify potential facilitators and barriers to patient portal use for secure messaging from the point of view of the provider.

Methods

In conjunction with the implementation of an online PP in June 2014, a total of 400 primary care patients completed a 37-item survey administered during a face-to-face interview, and a total of 59 full-time primary care providers completed a 33-item survey. These cross-sectional surveys were conducted during June and July 2014 at a total of 12 of the 43 primary care clinics affiliated with AltaMed Health Services, a large, multi-site community health center with locations in Los Angeles and Orange County. Patients were eligible if they were 18 years of age or older, received care at an AltaMed clinic site, and were fluent in English or Spanish. Providers were eligible if they were employed as full-time primary care providers (i.e., physicians, physician assistants, or nurse practitioners) at AltaMed. Patients were surveyed using convenience sampling where two trained survey administrators approached potential participants in clinic waiting rooms. Of all eligible patients approached (n = 488), 400 agreed to participate (82% response rate). We also obtained a convenience sample of full-time AltaMed

providers at 12 primary care clinic sites throughout Los Angeles and Orange County, and of all eligible providers approached (n = 74), 59 agreed to participate (80% response rate). Survey instruments were designed based on published literature and expert opinion, with most items being closed-ended with pre-coded responses. Survey domains included computer/Internet access and literacy, barriers and facilitators to patient portal adoption, and portal preferences.

Results

Initial analysis of provider survey data demonstrates that although 74.1% of providers believe the PP will increase patient satisfaction, only 39.7% of providers report being likely or very likely to recommend portal use to patients. Also, patients are more likely to believe that portal use would strengthen the patient-provider relationship than providers (71.8% vs. 37.9%, $p < 0.05$). Survey data also demonstrates that although providers generally believe that portal use is beneficial to patients, providers are hesitant to endorse portal adoption, with 86.2% feeling concerned or very concerned about having to carve out time to respond to patient messages, and 65.6% of providers feeling concerned or very concerned about reimbursement issues.

Provider Communication Behaviors and Preferences

Most providers (90%) indicated using the phone to communicate with their patients “a few” to “many times/week”, but the majority (63%) also play “phone tag” at that frequency. Very few providers indicated using an asynchronous communication method like email (5%) or text messaging (2%) to communicate with their patients (Table 1). Most providers (75%) also reported that they preferred using the telephone as the primary means of communication with their patients, with very few preferring asynchronous means of communication, such as EHR/patient portal (10%), email (5%), or text messaging (2%) to connect with their patients.

Additionally, a small minority of providers (35%) felt comfortable or very comfortable with the patient portal and only 25% reported feeling familiar or very familiar with the patient portal.

Table 1: Provider communication behaviors and preferences		
	%	(n)
Communication with patients		
Used phone several times/week	90%	53
Played "phone tag" several times/week	69%	41
Used email several times/week	5%	3
Used text messaging several	2%	1
Preferred method of communication		
Phone	75%	44
EHR (Patient Portal)	10%	6
Email	8%	5
Mail	5%	3
Text Message	2%	1
PP Comfort Level		
Familiar with PP	25%	15
Comfortable with PP	36%	21

Provider Patient Portal Concerns, Benefits, and Endorsement

The majority of providers (85%) were concerned or very concerned about having to carve out time to reply to PP messages, and most providers were concerned or very concerned about reimbursement issues (64%) and that patients would use the PP for an issue best addressed face-to-face (Table 2). Most providers (78%) also reported being concerned or very concerned about patients utilizing the patient portal for issues best addressed face-to-face and 56% were also concerned or very concerned that messages would be accessed by unauthorized persons. About

half of providers (51%) believed that the PP will reduce unnecessary clinic visits, and less than half of providers (37%) believe it will strengthen the patient-provider relationship or improve patient outcomes (46%). Nevertheless, most providers believed the PP will improve patient satisfaction (Table 2). A little over half of providers (59%) somewhat or strongly support the PP, but less than half (39%) reported being likely or very likely to recommend the PP to their patients (Table 2).

Table 2: Provider PP concerns, benefits, and endorsement		
	%	(n)
PP Concerns		
Concerned about carving out time to reply to PP messages	85%	50
Concerned that patient will use PP for an issue best addressed face-to-face	78%	46
Concerned about reimbursement issues	64%	38
Concerned that messages will be accessed by unauthorized persons	56%	33
PP Benefits		
Improve patient satisfaction	73%	43
Reduce unnecessary clinic visits	51%	30
Improve patient outcomes	46%	27
Strengthen the patient-provider relationship	37%	22
PP Endorsement		
Somewhat or strongly support PP	59%	35
Will recommend PP to patient	39%	23

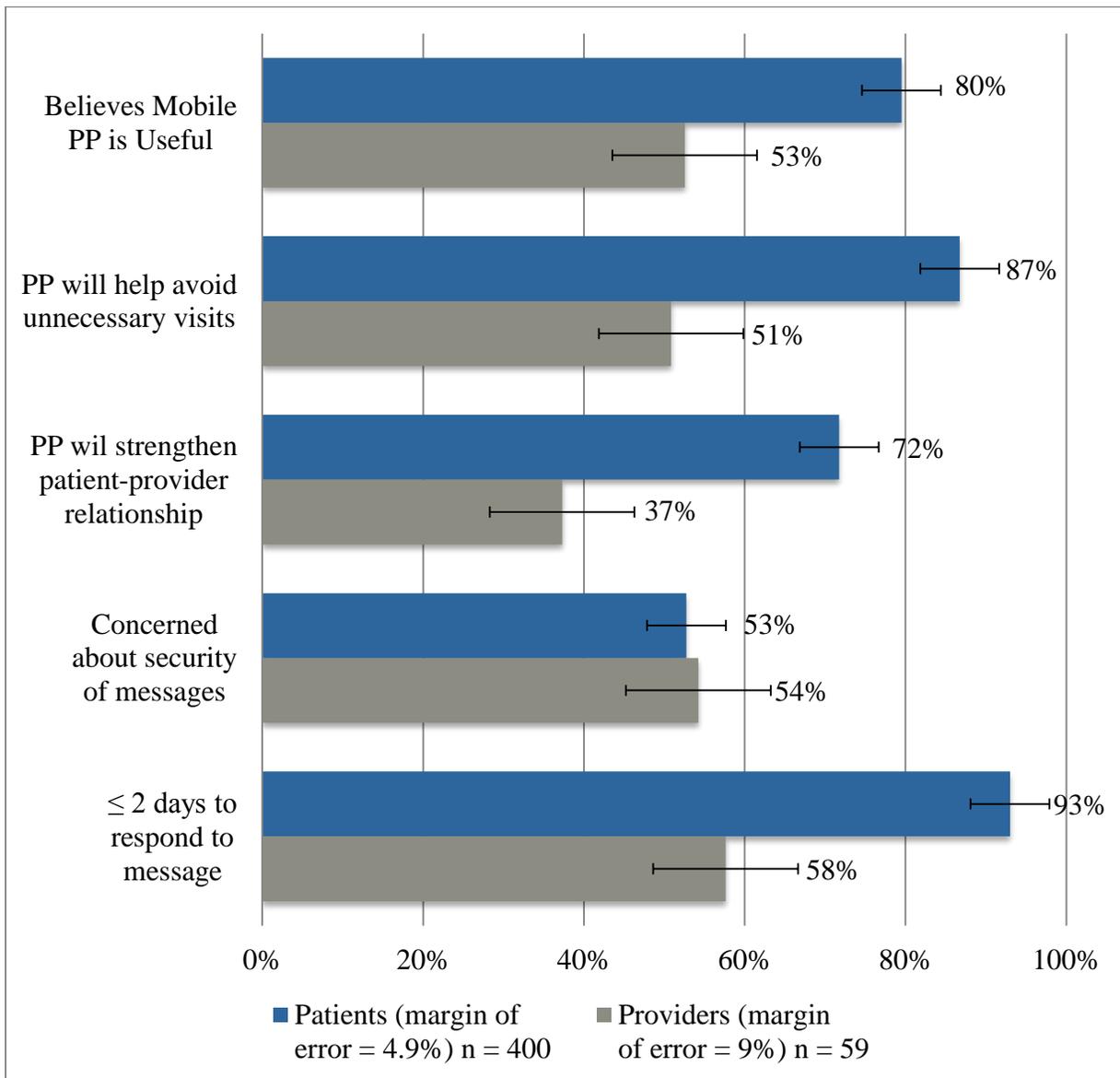
Patient vs. Provider Opinions on PP Benefits and Barriers

A comparison of patients and providers demonstrated that patients were more likely to believe that providers should reply to their secure messages in two days or less (93% vs. 58%, $p < 0.001$). Patients were also more likely to believe the PP will strengthen the patient-provider relationship (72% vs. 37%, $p < 0.001$), that it will help reduce unnecessary clinic visits (87% vs.

51%, $p < 0.001$), and that a mobile PP is useful (80% vs. 53%, $p < 0.001$) when compared to providers (Figure 1 and Table 3).

Table 3: Patient vs. provider opinions on PP benefits & barriers																		
Total	≤ 2 days to respond to message			Concerned about security of messages			PP will strengthen patient-provider relationship			PP will help avoid unnecessary visits			Believes mobile PP is useful for patients					
	%	(n)	<i>p</i> value	%	(n)	<i>p</i> value	%	(n)	<i>p</i> value	%	(n)	<i>p</i> value	%	(n)	<i>p</i> value			
Providers	13%	59		58%	34	<0.001	54%	32	0.730	37%	22	<0.001	51%	30	<0.001	53%	31	<0.001
Patients	87%	400		93%	372		53%	211		72%	287		87%	347		80%	318	

Figure 1: Patient vs. provider opinions on PP benefits & barriers



Discussion

Although most providers use the phone as their preferred mode of communication with patients, most patients also indicated playing “phone tag” with patients from “a few” to “many times per week”, indicating that asynchronous communication (i.e., email or text messaging) may be a more efficient means of communication. Nevertheless, only very few providers indicated utilizing email (5%) or text messaging (2%) to communicate with patients on a weekly basis. Thus, to increase clinic efficiency, it may be worth exploring the potential of increasing the utilization of more asynchronous means of patient communication, such as secure messaging through the EHR/patient portal.

It is clear that providers are hesitant to recommend PP utilization to their patients, as only 39% of providers reported that they would “likely” or “very likely” to do so. This may be due to a variety of reasons, but the two most salient motives that our study found were: (1) that relatively few providers (25%) felt “familiar” or “very familiar” with the PP and only 36% reported feeling “comfortable” or “very comfortable” with the patient portal, and (2) that most providers (85%) were “concerned” or “very concerned” about having to carve out time to reply to patient portal messages, with 64% also being “concerned” or “very concerned” about reimbursement for time spent replying to patient portal messages. Dichotomously, few providers reported being willing to recommend patient portal adoption to their patients even though the majority of providers (73%) believe that the patient portal will improve patient satisfaction. Thus, it is clear that providers understand the potential benefits that patient portal adoption can offer to patients, but they seem to be hesitant to fully endorse its utilization due to concerns about increased workload when they are already pressed for time.

Recommendations

Because provider endorsement has been shown to significantly influence PP adoption rates, it will be key for AltaMed leadership to convince providers of the benefits of PP utilization in order to ensure system-wide adoption of this technology. In order to accomplish this, it will be essential to inform providers of the many published benefits associated with PP use, such as improved patient satisfaction, increased productivity, better clinical outcomes, etc. It will be very important to reassure providers that PP use actually helps to increase clinic efficiency (less telephone tag, asynchronous communication, etc.) rather than increasing provider workload. Furthermore, it may prove beneficial to share patients' generally positive perspectives regarding the PP with providers to further encourage providers to promote patient portal adoption. Alternatively, to demonstrate that AltaMed leadership does recognize provider concerns about potentially increasing provider workload, it may behoove the health system to allow for protected administrative time to allow providers to respond to patient messages. A key step in moving forward will be for AltaMed to elaborate an effective incentives program to convince providers to support patient portal adoption, either by increasing providers financially, or by allowing them more administrative time.

Conclusion

There is a clear discrepancy between patient and provider opinions about the barriers to and benefits of PP adoption. Patients are significantly more in favor of utilizing the PP, recognizing that it will help strengthen their relationships with their providers and also believe that it will reduce unnecessary clinic visits and thereby save them time and financial resources. In the whole, it seems that patients are in favor of having another direct line of communication with their providers; on the other hand, providers seem to be less supportive of PP

implementation due to concerns outlined above. Additionally, this disconnect between what providers believe to be their patients' attitudes about the PP and what patients actually desire is seen again in the discrepancy with regards to a mobile version of the patient portal, with a greater significant proportion of patients being in favor of it. As mobile health technology is becoming more popular amongst underserved communities, it will be important to consider pursuing mobile patient portals for these populations.

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