# Patients' Perceptions of a Web Portal Offering Clinic Messaging and Personal Health Information

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## **Background**

As a majority of U.S. adults now have access to the Internet, patient demand for online access to their physicians has steadily increased. While electronic communication may improve the patient-physician interaction, adoption has been slow due to issues regarding security, physician workload, and appropriate use by patients. To improve care and facilitate patient-clinic electronic communication, Partners HealthCare developed Patient Gateway (PG), a secure Web portal which offers patients access to their medication and allergy list and messaging services such as prescription requests, appointment requests, and referral requests. This study evaluated patient perceptions regarding the value and impact of the portal.

## Methods

In December 2003, a random sample of 2000 patients from 9 primary care clinics who held a PG account for 6 months or more were mailed a paper-based survey. Survey responses were analyzed to assess satisfaction with the application and determine common message content and perceptions regarding the impact on communication.

#### **Results**

Twenty-three percent of patients returned a completed survey. Of those that used PG, 70% reported their overall satisfaction as good or better, 43% reported PG saved them time, and 47% felt PG helped to better coordinate their care. While 38% of respondents agreed that PG improves communication with their provider's practice, the majority either disagreed (30%) or were not sure (32%). Sending a question regarding medical care was rated as valuable by 72% of respondents and 61% valued the ability to view their medication and allergy list. However, patients most frequently rated the administrative functions as valuable features, such as the ability to renew prescriptions (85%), ask an administrative question (76%) and obtain referral approvals (75%). Therefore, it was not surprising that patients mainly sent messages regarding prescription requests (53%), referral approvals (43%) and appointments requests (36%). A third (31%) of respondents also sent messages containing questions about their medical care and 18% used PG to ask administrative questions. Patient reaction to the amount of time it took to receive a response via PG varied widely; a third were completely satisfied yet another third were not at all satisfied. Despite these issues, 80% were completely (44%) or mostly (36%) satisfied with the content of staff responses. Having experienced a triaged-based communication system, only a minority of patients felt it was always (8%) or usually (19%) important to deal only with their clinician when communicating via PG; a quarter of patients did not feel this was important and 43% felt it was sometimes important. Loss of a username or password was the most commonly cited reason for not always using or visiting PG (30%), followed by preferring to speak directly with someone at the clinic (27%).

## Conclusion

Overall, patients are satisfied with the Web-based patient portal and practice responses to their messages. Administrative features were most highly valued, although the clinical content to date is limited. Key areas for improvement include better username/password recovery support, better setting of expectations regarding the time to receive a response, and stimulating more direct participation by physicians. Further study is required to assess the practice factors related to differences in patient satisfaction.