Barriers to Use & Patient Perspectives on Managing Personal Healthcare in an Online World

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Introduction

Significant resources and high expectations are associated with the adoption of online Patient Portals that integrate tightly with Electronic Health Records.

Patient Portals are intended to improve disease management through greater patient engagement while achieving important economic efficiencies associated with scheduling appointments, communicating with providers, obtaining lab results, and ordering medication refills.

Specialties like Women's Health where strong communication, managing privacy concerns, and maximizing engagement are priorities stand to benefit most from effective patient portals that meet patient's needs.

Online retail, banking, and travel applications have all achieved utilization rates of 50% or greater while the majority of Patient Portals have remained at 10% or less. It is important to understand the reasons for such low portal utilization and what implications those reasons have for portal developers and policy makers in healthcare organizations.

Methods

This research was conducted in 2016 via a voluntary 22 question Likert scale online survey advertised to 2600 routine users of the military's social media platform (MilSuite) resulting in 254 participants. Free text responses were also collected to provide deeper insight into participant's preferences. *Tricare Online* was the primary patient portal assessed although most participants had experience with other clinic and pharmacy online and app based services.

The survey assessed both barriers to utilization directly; and underlying demand for portal services by comparing current and preferred methods for healthcare management for scheduling, communicating, obtaining results, and requesting medication refills, see *Figure 1*.

Results

Regarding barriers to patient portal utilization, 'Security Concerns' scored as the highest barrier while a third of participants reported a 'Lack of Awareness' regarding the existence of the patient portal. Participant also frequently reported 'Inefficiency' and 'Inconvenient' which seems unexpected as online options are typically expected to be efficient and convenient. A quarter of participants reported 'Registration Process' as a barrier for patient portal utilization because of complex password and identity confirmation requirements.

The difference between a respondent's 'Current Healthcare Management Methods' and 'Preferred Healthcare Management Methods' suggests that the demand for each of the five methods assessed and compared between *Figures 2* and *3*.

While smartphone trends are driving banking and travel tools toward app and web based solutions these results demonstrated a preference for 'In Person' and 'Email' management at the expense of 'Web Browsers' and 'Apps'.

Participant age and gender demographics were consistent with 2012 US Census Bureau statistics. Education levels were slightly higher than the general public although not skewed enough to preclude considering the populations equivalent.

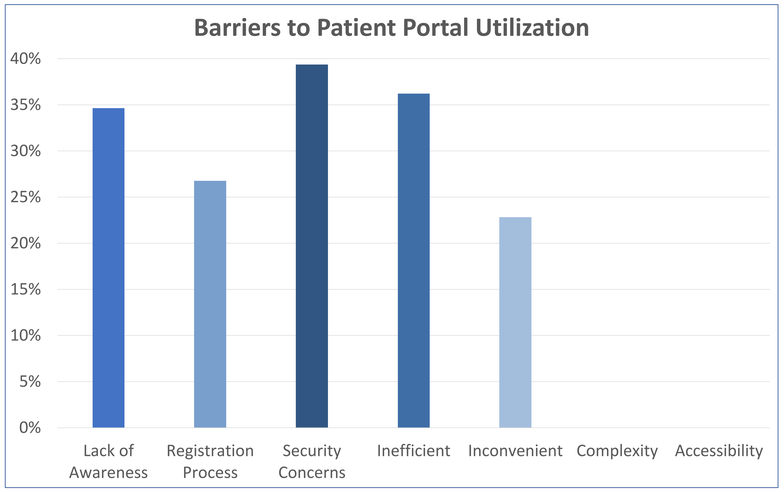

Figure 1. Responses identifying barriers to participant's online portal use.

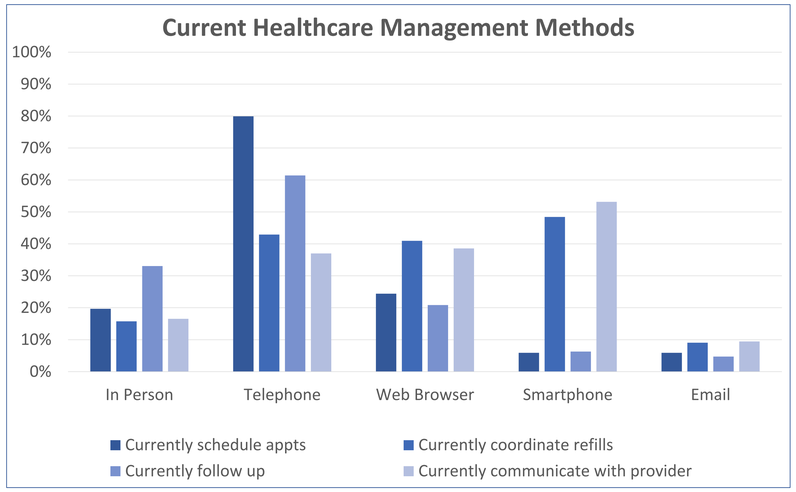

Figure 2. Participants currently utilized healthcare management methods.

Discussion

The potential efficiencies, convenience, and data management aspects of an effectively employed and well utilized online patient portal are too great to ignore. Every effort should be made to understand the current underutilization of patient portals and lessons learned should be applied to follow-on development.

The results from this project suggest that there are a variety of unique circumstances surrounding healthcare that are not shared by industries that have successfully deployed online tools. Scheduling a medical appointment is not as straightforward as booking an airline flight. Participants free texted their frustration at being referred to centralized appointment scheduling by telephone and showed nearly no current or preferred interest in online scheduling. Questions about when to schedule an appointment, what to do prior, or labs to obtain prior were reported to be best handled by knowledgeable office staff. Lab results obtained online were equally challenging due to the questions many generated. In person healthcare management in these circumstances understandably was preferred.

All of the decreased preference for online tools was offset by increases in email and in personal interaction which interestingly share the ability to freely express questions and concerns rather than being algorithmically locked into web and app interfaces. This suggests that successful portals will require more robust interfaces or more likely off-ramps to chat or voice support to complete the interaction.

Fortunately 'Lack of Awareness' was a significant barrier that studies have show can be easily addressed by aggressive office staff. Registration and security issues are constantly improving in the form of fingerprint, face, and voice recognition which may alleviate those barriers as well. Adding chat or voice off-ramps may adequately address the perceived inefficiencies and inconvenience as suggested by the participant's free text elaborations.

Maintaining the human touch in healthcare management as the process moves online is essential to gaining patient acceptance and implementation success.

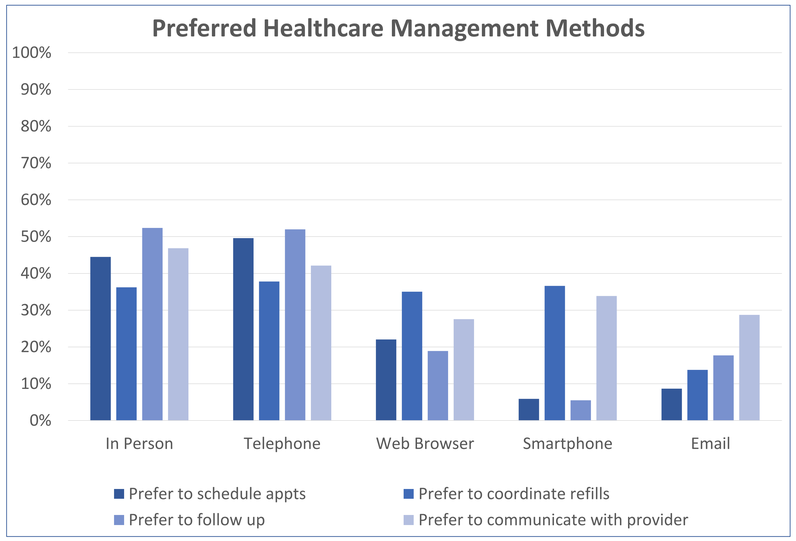

Figure 3. Participants preferred healthcare management methods.

Conclusions

Improving online patient portal utilization significantly may be as easy making patients aware of their existence and helping them register. Improving their usefulness will require adequately addressing the complex and emotionally sensitive communication aspects of healthcare management. This research suggests that online tools are unlikely to replace human interaction to the degree seen in the banking, travel, and retail industries. Portal developers and administrators should continue to plan for support staff who can pick up with patients where online tools become inadequate due to the amount of questions or complexity involved in the interaction. Portal success is essential and humans will likely be tightly integrated.

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