Web Portals and Patient Information-Seeking Behaviors

By Robert Miller, MD

With the growth of the Internet and the increasing penetration of health information technology into today's medical practices, patients have more opportunities than ever to interact with their physicians online and to remotely access parts of their medical records. Electronic patient-physician communication most commonly takes one of two forms: e-mail or Web-based messaging. Although e-mail is ubiquitous, familiar, and accessible to virtually anyone with a computer, it is inherently insecure and not always easy to incorporate into an office workflow or an electronic health record (EHR).¹

Web-based portals are becoming increasingly popular solutions, because they are more secure and include a broader range of features than e-mail. Examples include standalone products such as the RelayHealth online communication system (RelayHealth, Atlanta, GA), systems affiliated with commercial EHRs such as MyChart (Epic, Verona, WI), and homegrown systems linked to institutional EHRs such as PatientSite (Beth Israel Deaconess Medical Center, Boston, MA). In addition to enabling secure messaging between patient and physician, Web-based portals may provide a variety of services, including the ability to request an appointment, refill a prescription, and view—and in some cases amend—parts of the medical record.

Little is known about how patients perceive and use online portals and how currently available products are meeting their information-seeking needs. Weingart et al² reported that after PatientSite was introduced at Beth Israel Deaconess Medical Center in 2000, it grew rapidly in popularity, as measured by the number of eligible patients who enrolled and the number of patients who used the product actively on an ongoing basis. Patients most commonly reviewed their laboratory results and x-ray reports, or they used the system to send secure messages to their physicians and other providers. In another report, Zickmund et al³ described the use of HealthTrak, a Web portal at the University of Pittsburgh Medical Center (Pittsburgh, PA) designed for patients with diabetes. Interestingly, the authors noted that patient interest in the portal was inversely correlated with patient satisfaction with their providers and perceived provider responsiveness to their needs. Patients who were satisfied with their relationship with their physicians and felt there was adequate communication demonstrated less interest in and motivation to use the HealthTrak system.

In most cases, the patient-specific content contained in a Web portal is already part of the EHR itself, and it is uncertain to what extent the content or interface seen by the patient is in any way tailored to the needs of a layperson, let alone to the individual viewing it. It is reasonable to conclude that the needs of a patient in viewing such content are different from those of a

health care provider interacting with the same data in the EHR. It is in this context that the report by Groll et al⁴ in this issue of *Journal of Oncology Practice* helps advance knowledge in this area. The authors examined a cohort of patients with testicular cancer enrolled on a surveillance protocol at Princess Margaret Hospital (Toronto, Ontario, Canada) to determine factors that might predict for successful access of surveillance test results by patients in the EHR system. After conducting a series of focus groups, Groll et al used transcript analysis to identify key themes expressed by patients undergoing surveillance. The predominant factor that arose from the research was that patient perceptions of the surveillance process centered on the theme of reassurance. In other words, when patients accessed their laboratory and radiology results via EHRs, they were looking to be reassured that their cancer was in remission and that “everything's okay.” Another theme that emerged was that patients needed different amounts of information, and individuals required varying levels of detail in the way their test results were presented. For some, a simple yes or no answer about whether their results were normal sufficed; others required greater degrees of detail about specific results for reassurance. This is consistent with the theory described by psychologist Miller,⁵ who found that patients facing stressful situations like a cancer diagnosis often fell into one of two extremes: “monitors,” who tended to seek out as much information as possible about their condition to deal with stress, or “blunters,” who tended to avoid seeking information or who were satisfied with only small amounts of very focused information.

Patients searching for consumer health information usually exhibit specific information-seeking behaviors that are highly individualized.⁶ This is true whether the interaction is with a health care provider, consumer health information Web site, or patient portal as part of an institutional EHR. Clinicians should always attempt to tailor their messages to patients in face-to-face encounters by assessing patients' basic health literacy and coping styles. Likewise, designers of EHR patient portals need to recognize that a patient's interaction with a computer is really an extension of the patient-physician relationship, and systems must be built to be maximally flexible to accomplish the same goals.

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INTRODUCING ASCO'S NEW SOCIAL NETWORKING WEB SITE

ASCO has developed a new social networking Web site, *Oncology EHR: Quality and Safety*—where different oncologists can connect and share information about the use of Electronic Health Records (EHRs) in oncology practices. This new social networking Web site serves as a platform for oncologists and different vendors of EHRs to discuss the advancements, usability, and challenges that emerge in using EHRs in oncology offices. In addition to blogging, users can build up their personal profile page and incorporate widgets and RSS feeds on their page as well. Users have already begun posting invites to EHR-related events such as EHR Web casts, EHR Lab at the Annual ASCO meeting, and other EHR symposiums to be held at ASCO throughout the year. Become a member today! Visit <http://ehr.ascoexchange.org> to sign up.

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