# **Abstract**

To slow the growth of national health spending in the U.S., healthcare payers are moving from volume-based to value-based payment regimes. The objective of this shift from volume to value is to improve quality and reduce cost. One of the core goals of reimbursement change is to make the patient (or the patient's advocate) the center of his or her own care team. The point of enabling messaging between patient and provider and allowing patients to access, view and transmit their clinical information is to enable patients to be the chief actors in their own healthcare.

Patient portals can offer important benefits to patients *and* provider organizations. These technologies — particularly when integrated with an electronic health record (EHR) — have the potential to improve both quality and access to care through features that enable patients to: communicate electronically and securely with their provider, access their medical records, schedule appointments, pay bills, and refill prescriptions.

Emory's Patient Portal has evolved from a Personal Health Record (PHR) to today's current set of features, which include: secure messaging, prescription refill, lab results, and viewing the patient's health record. As of March 31, 2013, Emory's patient portal had 34,337 patients registered, and there are 511 providers signed up for the portal. In addition, we conducted on online survey of the University Health Consortium (UHC) to evaluate the status of development of patient portals among peer academic facilities.

In our project, we gathered data from random samples of Emory patients and Emory providers by conducting surveys and interviews with a focus on their knowledge of the Emory patient portal and the functions they would desire in a portal. The data collected from our surveyed patients provide strong evidence for a high level of untapped demand for the Emory patient portal among Emory's patients. The results of the provider survey contrast sharply with those from the patient survey. The portal is largely seen as uni-directional by providers: providers were more in favor of functions that allowed them to provide information to their patients and were rarely in favor of functions that allowed their patients to communicate with them. There are also significant educational gaps: providers were reluctant to endorse many of the functions that previous research has shown to be the basic requirements of an effective portal.

At the conclusion of this report, our team makes three recommendations on sustaining the current momentum of the portal and ensuring its continued success. These recommendations are in the following areas: 1) Patient Portal Functionality Evolution, 2) Provider Engagement, and 3) Patient Engagement. Although a portal may offer a link between patients and their electronic health information, or the convenience of scheduling an appointment or paying a bill, critical to the success of such a portal is the engagement of the clinicians. The ideal portal is not just a *patient portal*, but rather is a *patient-provider portal* that is embraced by patients and providers alike.

The terms electronic health record, persona health record, and patient portal can be generally defined as follows:

Electronic Health Record (EHR). An EHR is generated by a health care provider to document patients' medical and health information on a continuing basis. It may contain demographic data, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data, and radiology reports. Patients do not directly access an EHR, although certain data may be made available through a patient portal.

Personal Health Record (PHR). A PHR is owned and controlled by the individual patient (or proxy), and may have information that is not contained in a medical record. It is used for managing health information, promoting health maintenance, and assisting with chronic disease management. Common e-health tools focus on health information, behavior change/ prevention, and selfmanagement.

Patient Portal. A patient portal is a secure Web site through which patients can access a PHR and often certain information from an EHR. Portals typically enable users to complete forms online, communicate with their providers, request prescription refills, pay bills, review lab results, or schedule medical appointments. These tools can benefit patients and providers by enhancing patient access and increasing administrative efficiency and productivity.

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