

## Improving Uptake and Use of Personal Health Records

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<b>Organization:</b>	Brigham and Women's Hospital
<b>Mechanism:</b>	PAR: HS08-270: Utilizing Health Information Technology (IT) to Improve Health Care Quality (R18)
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<b>AHRQ Funding Amount:</b>	\$862,047
<b>Summary Status as of:</b>	December 2010

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**Target Population:** Adults

**Summary:** Personal health records (PHRs) allow patients to participate in their health care in new ways. While studies have found a high degree of patient interest in PHRs, actual adoption rates are low and, once adopted, improvements in patient quality of care have not been well demonstrated. Previous studies focused on the satisfaction of current users, but did not fully describe how a patient decides to use a PHR. Strategies that provider organizations can use to encourage and support PHR adoption and use among patients are also not well understood by researchers.

This project takes a comprehensive approach to studying adoption of PHRs using the Diffusion of Innovation Framework developed by Everett Rogers. This framework will assist in understanding the factors that influence adoption by studying the different stages of the innovation-decision process, including the perceived attributes of the innovation (PHR), attitudes toward adoption of PHRs, and the impact of perceptions and attitudes on behavioral intentions as well as actual behaviors. The project will introduce the PHR in four selected primary care and specialty practices (two controls and two active intervention practices) to study the impact of multi-intervention strategies on uptake and continued use of the PHR. Each practice is determining their own strategies which include approaches such as patient education about the PHR provided by clinic staff, supporting patients in registering and using the PHR, and use of a computer kiosk in the waiting room for patient self-enrollment in the PHR. The investigators will assess the facilitators and barriers to adoption, implementation, and use of the PHR at the organizational and patient levels, and evaluate the impact of the intervention on adoption and usage rates. The final task is to assess the impact of the PHR on the quality of care, as measured by a patient survey on patient-centeredness and through a set of quality measures on health outcomes.

This research will contribute to knowledge of how to encourage use of PHRs and, once adopted, how to increase the impact of the PHR on quality of care.

### Specific Aims:

- To introduce an intervention employing multiple strategies to improve the uptake and use of PHR in an ambulatory setting. **(Ongoing)**
- To evaluate individual-level and organizational-level facilitators and barriers associated with PHR adoption and implementation. **(Ongoing)**
- Assess the impact of the intervention on awareness, adoption rates, and use of the PHR. **(Upcoming)**
- Assess the impact of the interventions in improving quality of care. **(Upcoming)**

**2010 Activities:** The project initiated a six-month intervention period to improve the uptake of PHR in two intervention practices, one that provides primary care, and the other is a rheumatology specialty practice. To begin the intervention, the team conducted key informant interviews with selected providers and staff at the intervention and control practices at baseline to gather data on adoption and use of PHR and strategies for improving the uptake of PHR. These were completed at both the intervention and control practices (primary care and rheumatology) in 2010.

The intervention began in the primary care practice and is scheduled to start at the specialty rheumatology practice in early 2011. Each practice is determining its own strategies to improve the uptake of the PHR. At the primary care practice, physicians, medical assistants, and nurses are educating patients about the availability of the PHR, reception staff are educating patients about the PHR when patients make routine calls to the practice, and check-out staff are assisting patients in enrolling in the PHR. Other strategies are to hand out post card size cards describing the PHR and providing a lottery incentive to physicians and check-out staff for their efforts in enrolling patients in the PHR. The specialty practice is taking a different approach; they requested a computer in the waiting room so patients can self-enroll in the PHR because they felt their staff did not have time to assist patients in enrollment. In addition, the check-out staff at the practice is handing out the post card size cards describing the PHR to all patients at the time of check out.

Patient feedback on the decision to enroll in the PHR, and experience in enrollment and use of the PHR is being evaluated through patient surveys. The patient survey design was completed, and the first surveys have been distributed to participating patients.

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**Grantee's Most Recent Self-Reported Quarterly Status (as of December 2010):** Progress is on track in some respects but not others. About 65 to 80 percent of the milestones are being met, but there is a viable plan for achieving the others with minor delays. Project spending is on target.

**Preliminary Impact and Findings:** This project has no findings to date.

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**Strategic Goal:** Develop and disseminate health IT evidence and evidence-based tools to support patient-centered care, the coordination of care across transitions in care settings, and the use of electronic exchange of health information to improve quality of care.

**Business Goal:** Knowledge Creation