

Evaluation of Computer-Generated After-Visit Summaries to Support Patient-Centered Care

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Organization:	University of New Mexico
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Summary: The office visit remains a cornerstone of primary care and health information delivery. Yet studies have shown that by the time the patient leaves a facility, he or she may forget as much as 50 percent of the information relayed during the visit, which can negatively affect a patient's care.

Electronic medical records (EMRs) offer a new method of providing patients with information about their clinical visits through personalized, patient-specific handouts that summarize the topics and recommendations covered during the visit. These after-visit summaries (AVS) have the potential to improve a patient's retention of information about adherence to treatment plans and followup instructions. AVS can also facilitate the transfer of information between health settings. However, the content and formatting of AVS that will optimize patients' information retention and satisfaction is still unknown.

Through a contract with the University of New Mexico, Dr. Valory Pavlik and her team from the Baylor College of Medicine, Department of Family Practice provided expertise and guidance throughout the term of the project.

This project employed qualitative methods to gather patient and physician input into AVS development. The research team then developed three AVS versions with varying amounts of included information. The three experimental versions were evaluated in a randomized trial to examine the effects of differences in information content on patient recall and satisfaction. A fourth group of patients received the standard AVS used in each clinic. The study took place in four clinics in Texas that use the EpicCare EMR and serve an ethnically and socioeconomically diverse patient population. The research team included experts in study design and analysis, medical informatics, bilingual and bicultural patient information transfer, qualitative analysis, and clinical practice-based research.

The research team will draft and submit a manuscript about the research effort to a peer-reviewed journal and will propose processes for dissemination, including publicity through primary care organizations, academic primary care departments, practice associations, and various organizations active in health information technology (IT) development. Technical findings and after-visit summary-related products will be available for download on the Internet for use by other primary care providers. The team will prepare a final report that includes all study deliverables (e.g., copies of all research instruments), results, conclusions, suggestions for additional research, and actionable lessons learned.

Project Objectives:

- Ascertain patient attitudes, preferences, and needs regarding the delivery of information at a visit with a primary care physician. **(Achieved)**
- Identify primary physicians' attitudes about the utility, content, and value of the AVS. **(Achieved)**

- Develop and test three different versions of an AVS. **(Achieved)**
- Prepare an implementation guide to assist practices in developing and implementing an AVS. **(Ongoing)**

2011 Activities: During the year, the research team reviewed a summary of key themes from patient and physician interviews that pertain to AVS format and content, and developed three different prototype AVS forms. Issues related to facilities, extreme weather, personnel, and information technology have slowed patient recruitment, but recruitment and data collection will be completed by March 2012.

Preliminary Impact and Findings: The research team completed data collection at the Baylor Family Medicine (BFM) clinic, Houston Service Workers Clinic (HSWC), and Harris County Hospital District (HCHD) Martin Luther King clinic. Fifty-six patients were recruited at BFM, 48 of whom received the first call-back and eight of whom missed it. Thirty-nine received the second call-back while nine were lost to followup. Eighteen patients declined to participate. At HSWC, 77 patients were recruited. Sixty-eight received the first call back and nine missed it. Fifty-three received the second call-back and 15 were lost to followup. Twelve patients refused to participate. At HCHD, 51 patients were recruited. Forty-eight received the first call-back, three missed it. Thirty-nine received the second call-back and nine were lost to followup. Ten patients refused to participate.

Study staff was in the process of collecting data at the Harris County Hospital District, Strawberry clinic. Their goal is 40 English-speaking and 68 Spanish-speaking patients. By the end of 2011, their results included:

- English-speaking patients: Forty-four patients were recruited. Thirty-eight received the first call-back and zero missed it. No patients received the second call-back and none were lost to followup. Eight patients declined to participate.
- Spanish-speaking patients: Fifty-four patients were recruited. Forty-nine received the first call-back; zero missed it. No patients received the second call-back and none were lost to followup. Six patients declined to participate.

Target Population: Adults

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
