

Project Title: Secure Messaging in a Pediatric Respiratory Medicine Setting
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Organization: Yale New Haven Health Services Corporation
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Strategic Goal: Develop and disseminate health IT evidence and evidence-based tools to improve health care decisionmaking through the use of integrated data and knowledge management.

Business Goal: Implementation and Use

Summary: This project aims to evaluate how implementation of a secure e-mail messaging (e-messaging) system between clinicians and patients and/or guardians affects provider time, emergency department (ED) use for medication refills, and qualitative satisfaction with care of patients in a pediatric respiratory medicine setting. Currently the project is mid-way through, having completed 5 months of in-person recruitment of patients receiving care at the Yale Pediatric Respiratory Medicine Clinic, a subspecialty clinic within a tertiary care hospital serving diverse patients. A total of 176 patients expressed interest in using the system, with 117 of them agreeing to and completing a study survey of demographic information and experience with technology; 57 patients have enrolled to use the system, 54 of them on-site with the assistance of a research assistant. Two rounds of electronic reminders have been sent to patients who have expressed interest but have not yet signed up for the system.

Before enrolling patients, a time-motion study was conducted of clinic providers answering numerous phone calls from patients requesting appointments, refills, and information. The goal was to be able to determine whether this work took more or less time after implementation of the project. In addition, the project reviewed and abstracted logs of phone notes, categorizing the reasons for clinic contact.

Because of the low number of users, substantive comparisons cannot yet be made. It is unclear why interest in this new service has not been stronger. The few people who have used the system appear to be patients and families who are relatively new to the practice. The project began qualitative interviews to explore patients' thoughts and possible reasons for not signing up or for signing up and not using the system. Input is sought from those who have used the system to assess their satisfaction. Patient enrollment is continuing, but the project is now targeting new patients.

Despite these challenges, the team is optimistic that the project will yield a great deal of useful information. In particular, it is hoped that our qualitative interviews with patients will uncover information about unanticipated barriers to adopting the service. Such barriers may include patient belief that secure messaging is more cumbersome and difficult to use than traditional e-mail, user preference for direct e-mail with their providers over e-mail with "the clinic," and patient perception that a well-run phone system offers faster service than a secure messaging system. This may prove to be a case in which the technology is currently ahead of its target users (patients and families). So far, patients appear to prefer more traditional methods of contact at this clinic.

Specific Aims

- Evaluate the impact of secure messaging with regard to provider time, ED use for medication refills, and qualitative satisfaction by patients and clinicians. **(Ongoing)**

- Understand the content of what children, adolescents, and their parents will send as a secure message to their provider. **(Ongoing)**

2008 Activities: In 2008, the time-motion study of providers fielding patient inquiries was conducted, establishing a baseline prior to starting enrollment. In addition, inquiries were abstracted into different categories, in anticipation of secure health messaging content once patients enrolled.

Preliminary Impact and Findings: There are none to report at this time.

Selected Outputs

None available.