Assessing User Perceptions of an Electronic Patient Record (EPR) before Implementation

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Abstract
As part of a comprehensive strategy to implement an electronic patient record (EPR), faculty, residents, students and support staff, were surveyed to assess their attitudes and awareness towards an EPR before implementation. Results of the survey suggested a high degree of awareness and optimistic outlook by many users about the potential of the EPR to improve efficiency and patient care.

Introduction
In order to enhance the likelihood of success, it is important to understand end-user perceptions about an impending large scale health IT implementation such as an electronic patient record (EPR). It is becoming increasingly clear that such implementations are not IT projects but human projects.[1] Users who are aware of the functions of an EPR, and those who recognize the benefits may be more accepting of the change. Therefore, in this research, as part of a comprehensive implementation strategy we sought to gauge the opinions of end users at the University of Texas Health Science Center at Houston Dental Branch.

Methods
1. Developing the Survey Instrument
A survey instrument was designed with a goal to measure users’ attitudes and awareness of electronic health records. Specifically, we wanted to measure user perceptions on issues such as security, efficiency, and effect on patient care of an EPR as compared to paper records.

2. Disseminating the Survey
After receiving human subjects approval, a link to a web-based 12-item survey was sent to constituents at the Dental Branch by email. Approximately 700 individuals received the email including full time faculty, residents, students, and support staff.

Results
Response Rate and Demographics
Seventy-eight people responded to the survey. The response rate was approximately 10%. Respondents included 35% faculty, 29% dental students, 14% support staff, 12% dental hygiene students, and 3% identified themselves as other. Sixty-nine percent of the respondents were female.

Security of EPR
When asked if paper records were more secure than electronic health records most users were either uncertain (33%) or disagreed (45%) with the statement. Therefore, users appeared to have a positive perception about the security of EPR.

Efficiency of EPR
Fifty-two percent of users perceived that the EPR would improve their efficiency, while 27% were uncertain. Similarly, 44% of respondents disagreed with the statement that an EHR would take more time to complete than a paper record while 36% were uncertain. Therefore users were generally optimistic about the efficiency of an EHR compared to a paper record.

Potential of the EPR to improve care
Nearly half of the respondents thought that EPR would improve patient care, while 35% were uncertain. Only a quarter of the respondents disagreed that it would have a positive impact on patient care.

Conclusions
Surveying end users about their attitudes about an impending EPR implementation provided valuable feedback that assisted in building a strategy for implementation and training. In future work we will reassess end user opinion after implementation of the EPR.

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References