Housestaff and Attending Physician Knowledge Of and Attitude Towards an EMR on the Eve of Implementation

David Thomas, M.D.¹, Andre Kushniruk, Ph.D.², Joseph Kannry, M.D.¹
¹Mount Sinai Medical Center, New York, New York, ²School of Health Information Science, University of Victoria, Canada

Abstract
A variety of factors determine the successful implementation of EMR's. A major determinant of implementation success is clinical users’ acceptance and willingness to use the system. Previous studies have looked at communicating with and addressing physician concerns during and post-implementation of an EMR. Our qualitative study looked at communicating with and addressing concerns of physician (housestaff and attending) users on prior to (eve of) EMR implementation as well as determining the preferred means of communication.

Methodology¹
Our approach involved conducting focus group interviews with resident and attending physicians before they were introduced to a new ambulatory EMR system being implemented at Mount. Sinai Medical Center (this is part of a long term longitudinal study of EMR users). In addition, 137 of these residents completed a 37 question on-line survey (using SurveyMonkey.com©) that contained questions specifically addressing the following issues: (a) what type of prior computer and EMR knowledge did they have? (b) what knowledge did they have about existing EMR’s at Mount Sinai? (c) what form of communication of information (about the upcoming implementation) would they feel would satisfy the information needs about the roll out? and (d) what form of continuing communication with the implementation team did they prefer?

Evaluation Results
The focus of this presentation is on the analysis of the on-line questionnaire data (analysis of the focus group interviews is currently ongoing). 53.3% of the total of 137 survey respondents were attendings with 24.8% consisting of residents. 92% of the respondents indicated they used the Internet daily. 92% indicated they use Mount Sinai’s EDR (electronic data repository), 83% use TDS and 34% use Cerner. 53% of the respondents indicated that they strongly agreed that computers in clinical care support improvements in quality of care, while 40% indicated that they agreed with this statement (only 6.6% of the respondents indicated they were neutral or felt that computers did not support quality of care). 65% of respondents indicated that they had used an EMR before, with 76% of those respondents indicating their prior experience with using the EMR was either good or very good. 87% of respondents indicated that they agreed or strongly agreed that EMR’s improve quality of healthcare.

Analysis of what and where the respondents had heard about the upcoming EMR implementation indicated that there were a number of venues in which information was communicated, including by email, grand rounds, staff meetings and noon conferences. The majority (87%) indicated that they preferred information about the implementation to be disseminated via email, and that such information be disseminated several days to weeks in advance. The information most desired by respondents (in order of decreasing frequency) is the following (given as respondent response percents): functions of the EMR (76%), information about changes in workflow (70%), information about the roll out process itself (60%), description of the system (58%) and design information (44%). Finally, when asked how respondents would like to be able to communicate with the EMR team, the majority (89%) indicated that email was their preferred communication method.

Conclusions
In order to successfully implement EMR’s in large institutions it is becoming increasingly recognized that we must be aware of and sensitive to the expectation, background and information needs of those who will be using the systems. In this paper we have described our initial work along these lines.

¹ Acknowledgement: Kristin Myers, EMR project manager, who made this research possible, Tiffany Ingram, EMR lead trainer, who made this research a reality, and Elizabeth Borycki for last minute assistance