Qualitative Study of Patients' Perceptions of Safety and Risk Related to Electronic Health Records in a Hospital

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Introduction:

We undertook this qualitative study to find out what patients thought of risk and safety in the context of Electronic Health Record (EHR) within a hospital. Their unique perspective as patients could give new insights, leading to help improve patient safety. A qualitative method was used due to the lack of a pre-determined framework, as well as the nature of the question to understand patients' perceptions.

Methods:

The study was approved by the hospital Institutional Review Board. The subject inclusion criteria were: age greater than 18 years, ability to participate in a 45 minute interview, ability to read and understand at or above sixth grade level. The exclusion criteria were anyone with altered mental status, dementia, or active schizophrenia. Subjects were recruited through charge nurses in units where patients were staying. Although the subjects were selected based on availability on the day of the interview, it was also purposive sampling[1] in that we actively sought patients admitted for different problems, in different settings, and different age groups, as well as different genders.[1, 2]

After consent was obtained from each participating patient, a semi-structured individual interview was performed by a member of our team based on a set of general questions and an aide-memoir.[1, 3] Another team member tape recorded the interview and took written notes of reactions and interactions between the patient and the interviewer.[1, 3] Thus far, six interviews were conducted, each lasting from 20 to 35 minutes. Each interview was transcribed verbatim from the recording, and later, comments by the interviewer and the observer were added to the transcript.

The transcript was then coded[2] by team members independently with the aid of a software tool. Afterwards, concepts were discussed as a group, arriving at a consensus on over-arching concepts. Emerging concepts and candidate theory influenced subsequent interviews through purposive sampling and through changes in aide-memoir that directed the focus of the interview.[1, 4] New concepts that would surface from the analysis of each interview were compared and re-analyzed with data from prior interviews, modifying candidate theory as needed, to encompass new concepts that emerged.[1, 2, 4]

Preliminary Results:

Thus far, two candidate theories emerged from the analyses related to three constructs: safety, risk, and EHR. First, the patients' contextual meaning of 'safety' is related to personal safety. When asked about safety, they raised concerns about falls, infections from unwashed hands, and inability to get out of the way of hazards, i.e. fire.

Second, the risk of Computerized Physician Order Entry (CPOE) and Electronic Medical Record (EMR) are influenced by the patients' prior roles or life experiences. A nurse in training found CPOE highly useful because she would not have to interpret physicians' handwritings, resulting in less risk, but had few words to say when it came to EMR related safety and risk. A retired teacher in her seventies thought computers had their place, but worried about dehumanization and replacing humans with computers.

All of these are candidate theories that will need to be substantiated with further interviews and analyses.

Conclusion:

While we are waiting for a technological panacea for medical errors, we need to keep our perspective. As humans we will err, and technology may help us reduce medical errors, but ultimately, we are the ones who will care for our patients. As one of our interviewed patients stated most simply and elegantly, if "somebody cares about you, you're going to be safe."

References:

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