



Decision and Information Technologies

Center for Health Information and Decision Systems

"[Privacy of health information] is not something that we can long ignore. The Senate and House do need to revisit privacy soon." Statement from William Pewen, senior health policy adviser to Senator Olympia Snowe (R-Maine), April 11, 2006.

Privacy Concerns Related to EHR Use Can Be Alleviated Through Proper Messaging

Electronic health records constitute a significant technological advance in the way medical information is stored, communicated, and processed by the multiple parties involved in the delivery of health care. However, there is widespread concern that privacy issues may impede the diffusion of this technology. A study recently completed by the Center for Health Information and Decision Systems (CHIDS) at the Robert H. Smith School of Business, University of Maryland found that, while concerns about privacy related to the use of electronic health record systems can be significant, people can be persuaded to accept their use if exposed to strong value-based arguments.

Using a novel experimental methodology, researchers randomly assigned two different types of respondents – health information technology stakeholders (clinicians, vendors, payors, etc.) and non-stakeholders – to two different treatments (strong and weak argument quality) and assessed the impact of ‘concern for information privacy’ on the relationship between these variables and attitude change. After providing respondents with descriptions and uses of EHRs, they were asked to respond to questions designed to assess their attitudes toward the use of EHRs by providers. Respondents were then presented with either strong messages about the value and benefits of EHRs, or weak messages which were primarily anecdotal in nature. Next, the respondents were asked to respond to questions related to their concerns about the use, collection, and storage of personal health information. The last step was to reassess attitude after respondents were provided the strong or weak messages.

Results show that in addition to having more favorable pre-manipulation attitudes toward the use of EHRs, the HIT stakeholders also demonstrated a statistically significant increase in pre-to-post attitude, over non-stakeholders, especially when strong messages were presented. Simply put, it is easier to persuade HIT stakeholders of the value of EHRs than it is to persuade non-stakeholders. This may be due to a lack of understanding, or misunderstanding, of the uses of EHRs by non-stakeholders. It may be the case that the uninformed are unnecessarily concerned about functions and features of EHRs, which may or may not exist. For example, evidence from this study also revealed respondents had great concern about their employer finding out about personal medical information if their data were located in an electronic, Internet accessible database.

Relative to privacy concerns, researchers found that most respondents, even those with greater than normal concerns for privacy, reacted positively to strong messages. This demonstrated that privacy, while a salient barrier, is not enough to halt the acceptance of EHRs. Researchers suggest that an educational program designed to demonstrate the benefits of EHR use would improve the uptake of the EHR technology.

This manuscript is currently under final preparation for peer review.

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