SSC07-03

Scientific Papers

Patient Directed Internet-based Medical Image Exchange: Consumer Experience from an Initial Multicenter Implementation

Monday, 10:50 - 11:00 AM

Location: S402AB

PARTICIPANTS:

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David S Mendelson MD: Spouse, Employee, Novartis AG Advisory Board, Nuance Communications, Inc Advisory Board, General Electric Company Advisory Board, Toshiba Corporation

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CONCLUSION

We confirmed previous assumptions that patients highly value direct access to their medical exams and showed that the implementation of this internet-based, interoperable, image-sharing solution meets patient and provider expectations regarding ease of access, timeliness and privacy.

Background

Fragmentation of health information among physicians, institutions or practices and Inefficient exchange of test results decrease quality of care and contribute to high cost. The aim of this study is to evaluates patient's and provider's satisfaction with the use of an internet-based, interoperable image-exchange system, that gives patients ownership of their imaging exams and control over their access.

Evaluation

Patients undergoing any radiological exams in 4 academic centers were eligible to receive online Personal Health Records (PHRs). Participants were provided a brief survey, to assess patient's and physician's experience with the exchange of images. Patients were instructed to complete and to return the survey after their visit with their referring physician. Survey responses were rated on a 5 point scale and comparisons were performed using logistic regression.

Discussion

2,216 patients, mean age 49.8 (±19.9) were enrolled between July 2012 and July 2013. The median number of exams uploaded per patient was 6. The most common types of exams were x-rays (34%), CT (26%) and MRI (18%). 502 (23%) patients returned their survey. Of these, 448 identified the method used at the visit to share images (Internet, COs, both Internet and COs, other) and 165 included a section filled by their physician. Nearly all patients liked having direct access to images and 78% viewed their medical images independently. Satisfaction with the privacy and security of the method by which radiologic exams were shared was similar between PHR users and COs users (91% vs. 92%, respectively). More PHR users than CD users were satisfied with ease of access (89% vs. 79%, p<0.0001). Most physicians reported a favorable experience with the PHRs with no differences compared to other methods.