RSNA Press Release

Patients Take Control of Their Medical Exam Records

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CHICAGO – Patients value direct, independent access to their medical exams, according to a new study presented at the annual meeting of the Radiological Society of North America (RSNA).

Fragmentation of health information among physicians, healthcare institutions or practices, and inefficient exchange of test results can decrease quality of care and contribute to high medical costs. Improving communications and giving patients more control over their care are critical goals of health IT initiatives.

"Easy and timely electronic access to an online unified source of radiologic exams under a patient's direct control can potentially improve healthcare quality, enhance the patient's engagement in their medical care, and reduce unnecessary imaging utilization and exposure to ionizing radiation," said Giampaolo Greco, Ph.D., M.P.H., assistant professor in the Department of Population Health Science and Policy at The Mount Sinai School of Medicine in New York City.

Dr. Greco and colleagues set out to evaluate patient and provider satisfaction with the use of RSNA Image Share, an Internet-based interoperable image exchange system that gives patients ownership of their imaging exams and control over access to their imaging records. The network enables radiology sites to make imaging exams available for patients to incorporate in personal health record (PHR) accounts they can use to securely store, manage and share their imaging records. Sites can also use the network to send patient imaging records to other participating sites to support better informed care.

As compared to other systems based on point-to-point private networks, the RSNA Image Share system avoids the legal delays and expenses associated with virtual private networks.

At A Glance

- Fragmentation of health information and inefficient exchange of test results can decrease quality of care and contribute to high medical costs.
- The RSNA Image Share network enables patients to securely store, manage and share their imaging records through the Internet using personal health record accounts.
- The network meets patient expectations regarding ease of access, timeliness and privacy.
and enables the same flexibility of access characteristic of physical media like CDs. Patients
who use this system have the ability to allow any provider they wish to access their images,
as they do with CDs.

"This is a standards-based solution designed to achieve full interoperability of health
information technology systems. Anyone, physician or other, no matter their location or
affiliation, can view the images with proper patient authorization," Dr. Greco said.

For the study, patients undergoing any radiologic exams in four academic centers were
eligible to establish online PHR accounts using the RSNA Image Share network. Patients
could then use their PHR accounts to maintain and share their images with selected
providers, creating a detailed medical history accessible through any secure Internet
connection.

Between July 2012 and August 2013, the study enrolled 2,562 patients, mean age 50.4,
including a significant representation of older individuals. Older individuals have the
highest healthcare utilization and often experience or perceive a significant barrier in using
information technology.

"The high level of enrollment among people in this age group demonstrates their interest in
tools that may facilitate the management of their complex medical records and
communication with their providers," Dr. Greco said.

The median number of exams uploaded per patient was six. Study participants were
provided a brief survey to assess patient and physician experience with the exchange of
images, and 502 patients completed and returned their surveys. Of these, 448 patients
identified the method used at the visit to share images: Internet, CDs, both Internet and CDs,
or other, and 165 included a section completed by their physician.

Nearly all (96 percent) of the patients responded positively to having direct access to their
medical images, and 78 percent viewed their images independently. There was no difference
between Internet and CD users in satisfaction with privacy and security and timeliness of
access to medical images. A greater percentage of Internet users reported being able to
access their images without difficulty, compared to CD users (88.3 percent vs. 77.5
percent).

"We found almost unanimous agreement from patients on the value of having direct,
independent access to their imaging exams," Dr. Greco said. "This report shows that an
image-sharing solution that is patient-directed and Internet-based is feasible and not only
facilitates access, but also, with respect to privacy and security, generates the same level of
user satisfaction as that attained through CDs."

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Note: Copies of RSNA 2014 news releases and electronic images will be available online at
RSNA is an association of more than 54,000 radiologists, radiation oncologists, medical physicists and related scientists, promoting excellence in patient care and health care delivery through education, research and technologic innovation. The Society is based in Oak Brook, Ill. (RSNA.org)

Editor's note: The data in these releases may differ from those in the published abstract and those actually presented at the meeting, as researchers continue to update their data right up until the meeting. To ensure you are using the most up-to-date information, please call the RSNA Newsroom at 1-312-791-6610.

For patient-friendly information on security of electronic medical information visit RadiologyInfo.org.

For more information on RSNA Image Share, visit RSNA Image Share.