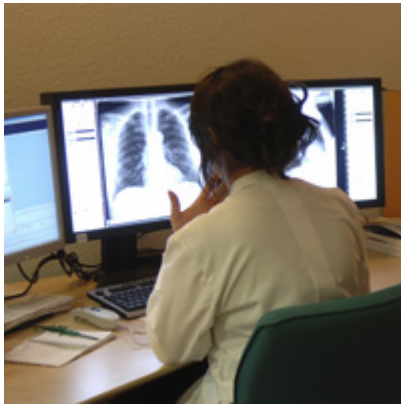


Clinical information access impacts radiology interpretation

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The majority of radiologists at eight academic medical centers are dissatisfied with their ability to access clinical patient information at the time of interpretation, according to results from a report published online before print in the *Journal of Digital Imaging*. The report also indicates that the lack of access to pertinent clinical patient data may be a critical element that limits the accuracy of the radiologist's diagnostic decision-making process.

“Given the increasing volume of radiological exams, the decreasing frequency of direct communication with the referring provider, and the distribution of patient data over many clinical systems, radiologists often do not have adequate clinical information at the time of interpretation,” the authors wrote.

William W. Boonn, MD, and Curtis P. Langlotz, MD, PhD, of the department of radiology at the Hospital of the University of Pennsylvania in Philadelphia, designed the survey. Among its 27 questions were an assessment of the IT environment in which the respondent practiced, including how radiology orders were typically processed and how images were displayed for interpretation. In addition, opinions about acquisition and access to relevant clinical patient information, both at the time of the examination and in follow-up, were obtained.

A total of 139 radiologists responded to the survey, with the vast majority (90 percent) practicing in an academic setting. Slightly more than half (54 percent) were attending radiologists; the remainder of the survey cohort was comprised of radiology fellows and residents.

The survey found that nearly three quarters of the respondents (72 percent) reported that they frequently needed more clinical information about their patients than was available at the time of study interpretation. More importantly, 87 percent acknowledged that additional clinical information was

significant and that this information could change or modify the interpretive report.

“Of the available sources of information, radiologists reported that outside radiology reports, admission notes and progress notes typically yielded their preferred clinical information,” the authors stated. “However, despite their desire for these information sources, they reported using them less than 15 percent of the time.”

More than half (53 percent) of the respondents indicated that their reasons for not seeking access to additional clinical information was that such efforts were too time consuming.

Obtaining follow-up data on patients proved to be equally problematic for radiologists. The authors reported that clinical follow-up information was predominantly obtained either through discussions with the referring clinician or through subsequent imaging or pathology reports.

“Our findings demonstrate that most radiologists want more clinical information when interpreting images and that this information would impact their report, but they are discouraged by the time it takes to access this information,” the authors noted. “In addition, current mechanisms for monitoring necessary patient follow-up are inadequate.”

Boonn and Langlotz observed that many hospitals have multiple different systems used to access clinical data, which presents challenges to radiologists through multiple logins and user interfaces. In addition, legacy systems may not be fully integrated throughout the healthcare enterprise due to nonstandard, proprietary interfaces.

The pair believes that their survey indicates the critical need for an integrated application for the automatic identification, selection, retrieval and display of pertinent patient information at the time of interpretation. In addition, this application needs to provide alerts and reminders for patient follow-up.

“Together, these applications would have a significant impact on the satisfaction of radiologists, the quality of radiology interpretations, and thereby on the quality of care,” they wrote.