



Study: Electronic Orders deliver More Clinical detail

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Referring physicians provide more detail in their orders for imaging studies when they use a computerized physician order entry (CPOE) system as opposed to paper-based requisition forms, but radiologists need to be involved when planning the shift from paper to electronic ordering, according to a new study in the *Journal of the American College of Radiology*.

Radiologists at Massachusetts General Hospital (MGH) in Boston discovered this after analyzing both paper-based and computer-based requests by emergency physicians for abdominal CT examinations. They published their results the March 2009 issue of *JACR* (Vol. 6, pp. 194-200).

MGH's emergency department implemented a CPOE system for ordering radiology exams in March 2007 as part of an effort to streamline workflow. In the *JACR* study, radiologist Dr. Hani Abujudeh and colleagues evaluated 10 days of paper-based requisitions and 10 days of computer-based requisitions for abdominal CT exams to determine if there were significant differences in information provided about signs and symptoms, abnormal test results, prior diagnoses, and the current clinical question being asked. They evaluated a total of 141 paper-based and 135 computer-based requests.

More of the computerized requisitions included medical history information (71.1% versus 51.1%), and more also included clinical questions (52.6% versus 34.8%). The authors attributed this to the fact that it may be easier to convey information by typing it instead of writing it out longhand, and that a text messaging box in the computerized form might be interpreted by the emergency physicians as a request for greater detail than lists with boxes to check off.

The ease of access to other clinical data displayed on workstations also may motivate emergency physicians to examine laboratory results while drafting notes about the patients, and include this in the requisition, the authors speculated.

Typed information about prior history was brief for both formats, and information about signs and symptoms was nearly identical. The authors attributed this to the CPOE form not adequately requesting the information the radiologists desired. For this reason, they recommended that radiologists actively participate in content development of radiology exam requisition forms when CPOE systems are being implemented in hospitals.