Defining the Top Radiology Patient Safety and Risk Issues

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In defining the top patient safety issues identified in our radiology claims data, we applied the Pareto Principle. It reminds us to focus on the 20% of processes that make up 80% of unanticipated outcomes or errors. The 20% of processes in radiology claims includes interpretation, communication, clinical systems, and documentation.

As the national literature and our claims data indicate, failure or delay in diagnosing, especially breast cancer, is the most frequent allegation in radiology malpractice claims. In analyzing the data, it is important to acknowledge the debate about the degree to which the role of hindsight bias plays in the review of a new radiology test identifying cancer when compared with a previous test interpreted as normal. In addition, the benefits, expectations and limitations of certain radiology tests, such as screening mammography, are controversial within the medical community and general public. These issues notwithstanding, certain aspects of interpretation, communication, clinical systems, and documentation are the areas within your control that can have the most impact on patient safety and risk.

Interpretation

When allegations of failure to diagnose occur, there is often a failure to identify the need for appropriate additional diagnostic modalities or procedures in accordance with recognized practice guidelines. It is important to document and communicate to the ordering physician your recommendation for follow-up with other diagnostic modalities or procedures to resolve an actual or potential abnormality. Inform the patient as well and make sure documentation reflects this communication.

New technology, while never a substitute for your medical acumen, has the potential for significant improvements in patient safety in diagnosis. Computer Assisted Detection (CAD) has the capability of marking conspicuous structures & sections to aid in reading images by alerting radiologists to algorithm-based abnormalities in the images. Advantages of this technology are that over time it improves interpretation skills as well as provides for a problem-oriented approach to diagnosis. However, with the recent use of digital capabilities and its ability to manipulate images to aid diagnosis, some speculate that more lawsuits will arise since conspicuity of abnormality can be enhanced. Since there are an infinite number of views available with this technology, and there are no professional standards or guidelines addressing a set of “standard” views a radiologist should look at, it could be alleged that a radiologist was negligent for not viewing that one view in particular that reveals an abnormality. Consequently, conventional legal thinking about medical images and how they might apply in a lawsuit will change.

Communication

Communication is an active process which includes obtaining information from and sharing information with the referring physician. Inadequacy of pertinent clinical information on the test request can compromise the diagnostic interpretation. Vague reasons for a study written by the referring physician on a prescription and reliance on patients being fully informed and/or recalling the reason for the exam is unsafe. Enhance the information you receive from referring physicians by utilizing a standardized request form that you make available to all area practices. Be sure to identify whether certain specialties and tests, such as an obstetrical ultrasound, may require a designated request form. Be sure to include a space for the physician to document the specific reason for testing and any significant patient complaints or physical findings. In the case of a request for mammography, critical information such as a history of a breast lump as well as description of the location of that lump should be included on the form.

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Inadequate or lack of communication with the referring physician of non-routine significant abnormal or unexpected incidental findings that either pose a threat to a patient’s life or may affect the patient’s health is one of the greatest problems facing radiologists.

Clinical Systems

A major patient safety and risk issue is the availability of comparative studies. Two major reasons for films not being available include original films not returned to the center and prior films from other centers not provided to the center at the time of the new test. It goes without saying that digital archiving eliminates the factor of lost films. A large percentage of centers surveyed indicated that films are copied only sometimes prior to release. In addition, these centers do not verbally communicate to patients, nor do they include a statement in the signed acknowledgment form, indicating that the films are the property of the center and must be returned within a specific timeframe. Release of original films should be kept to a minimum. When release is necessary, patients should be informed of the importance of returning the films and sign an acknowledgment of such.

It is customary for radiology centers to request that patients bring previous studies with them from other centers for the radiologist to compare with current studies. It is understandable that patients may forget to pick up films from other centers to bring with them to your center on the day of their study. If your usual process is to call patients a day or so prior to their appointment, this is an opportunity to again inform the patient of the need to obtain the prior films. The gold standard of obtaining prior films if not provided to the center the day of the study is to implement a tracking system to follow-up with the patient and referring physician to obtain the studies after the study is completed. Attempts to reach the patient or physician by phone or mail should be documented, and copies of letters or postcards mailed should be retained. A PACS may have the capability to automate this workflow process.

When scheduled patients fail to show for their exam, they not only cause a workflow interruption but also an increased risk to the radiology center. A survey of insured radiologists indicates that many do not communicate patient no-shows to the referring physician. The optimal process would be to inform in writing to both the patient and referring physician that a no-show occurred, and the study should be rescheduled. A helpful tip is to engage the referring physician in following up with the patient as soon as possible to avoid potential delays in patient work-up with a letter such as:

Our records indicate you are the referring physician for the patient listed above. We have been tracking possible problems for this patient that were detailed on an ultrasound examination performed on 9/10/08 in which follow-up ultrasound was recommended. This letter is to notify you we have not been able to resolve this diagnostic follow-up as being complete due to patient cancellation (or no-show) for a follow-up study on 12/10/08. Your assistance to resolve this exam is required.

A PACS may have the capability to automate this workflow process through generation of no-show letters to the patient and referring physician. A formal mechanism should be created to identify and address all non-resolved studies. To assure that no study is left uninterpreted, a process should be established to identify any uninterpreted studies and for all radiologists to follow up in promptly interpreting them. In situations in which an entire study or key images are lost, or when images cannot otherwise be interpreted, the referring physician or the patient should be promptly contacted to schedule a repeated study.

Documentation

Since the majority of the communication with the referring physician is through documentation of the radiology report, inadequate reports can compromise care and increase your risk. Comprehensive documentation
may improve patient outcomes and defense should an unanticipated outcome and ensuing claim occur. Make sure the documentation includes:

• Recommendations for further studies that include your indication (e.g. “CT may be helpful in staging, localization, or characterization”). Likewise, recommendations for procedures should also include your indication (e.g. “bronchoscopic biopsy, percutaneous needle aspiration or endoscopy may further differentiate the mass”).

• If applicable, reference that magnified views were reviewed in the interpretation.

• Limitations of study, such as “prior films for comparison were not made available by the patient.” Also document that the patient was again informed to obtain and provide the studies, if possible (e.g. may not be possible if lost).

• If prior films are available and reviewed, comparison should be mentioned in the report. In digital systems, the capability readily exists for comparison. Documentation must reflect historical comparison. Otherwise it could be alleged that the radiologist is negligent if old digital images that are readily available were not taken into consideration.

• Direct impression and recommendation. Avoid vague statements such as, “if clinically indicated.” If you make a recommendation, document it clearly and include the indication.

Documentation of communication with other providers is critical. Assure there is a permanent record of the communication of the report to the ordering provider including date, time, and mode of transmission of the report. If reports are faxed, staff should check to see if the transmittal was successful and maintain a permanent record of the transmittal document.

Conclusion

Careful attention to mechanisms to improve interpretation, communication, clinical systems and documentation can provide the greatest impact on patient safety and risk. As a team, staff and physicians can identify where potential failures may occur and design better, safer processes.

Resources

1 Digital Imaging Meets the Law, Health Imaging.com, Written by Lisa Fratt, Tue, Aug 31 2004

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