COMMUNICATION AND RADIOLOGY
Jana C. Arellano, RTT

Objectives

■ Evaluate the importance of communication in Radiology.
■ Identify the interaction points of communication in the medical imaging workflow.
■ Utilize the PACS system and EMR system to bridge the communication gap.

Importance of Communication in Radiology.
Importance of Communication in Radiology.

- A study in 2005 tracked the cascade of errors. Fully 80% of the errors that initiated cascades involved informational or personal miscommunication.
- Research conducted during the 10 year period of 1995-2005 has demonstrated that ineffective team communication is the root cause for nearly 66 percent of all medical errors during that period.
- Clinical Communication failures are considered the leading cause of medical errors.

- A ten year study in Radiology errors reported: Among 380 communication errors in a radiology department, 37.6% had a direct impact on patient care, with an additional 52.6% having a potential impact. Most communication errors (52.4%) occurred at steps other than result communication, with similar severity of impact.
- Radiology itself is one of the specialties most liable to claims of medical negligence.

Communication: improved Patient Outcomes and Satisfaction
Communication and Patient Outcomes

- Improved patient health by decrease in medical errors.
- Improved patient safety.
- Improved quality of care.

Improved Patient Satisfaction

- Healthcare has shifted to the patient centered approach.
- Patients have more options in where they receive their care - urgent care, hospitals, and outpatient facility.
- Hospitals are required to conduct HCAHPS Surveys. Which is a survey to patients that is focused on the patient experience.
RADIOLOGY FACTS

- In addition to their amazing uses in the medical field, x-rays have been used in the art world to examine under-paintings, which are rough sketches artists used to guide their final paintings.
- Due to x-rays, scientists were able to see the double-helix structure of DNA in the early 1950s.
- Despite incredible technology advancements in imaging, x-rays continue to be the most common form of imaging used by medical professionals.

Communication Impact on the Radiologist Diagnosis

- Restated: Radiology is a specialty most liable for malpractice claims.
- Communication can lead to less lawsuits for the radiologist, however technologist have been listed in malpractice lawsuits.
- Imaging assist in the diagnosis for the patients. In some modalities, the technologist are the one’s leading the radiologist to the exact diagnosis.
- Proper communication to the radiologist is the responsibility of the technologist.

Interaction Point of Communication

- The workflow in the radiology department has increased over the last ten years.
  - More people have access due to the availability of insurance
Technologist and Patient

- Patient centered approach
- Obtaining health histories
- Verifying patients identity
- Explain the procedure to be performed
- Screening for safety
- Providing instructions
- Answering patient questions
- Explaining post-examination care

Technologist to Technologist

- Coordination within the medical imaging department.
- Medical imaging is a team work environment.
- As a member of the team we ask for help, we assist each other.
- Coordination with modalities to ensure the flow of the patient is efficient.
  - X-ray to CT or ultrasound.

Technologist and Patient

- Technologist are the core of the radiology experience – for that reason we are the people that are responsible for the majority of the patients experience.
- Patients' perceptions of the quality of the healthcare they received are highly dependent on the quality of their interactions with their healthcare clinician and team.
- Communication at every point will ensure that patients have clear expectations.
- The incorporates introductions, time durations, explanations and next steps.
- This includes the communication to the family members present or caregivers.
- Remember medical imaging contribute to the overall patient satisfaction of the facility.
Technologist and Radiologist

- We are required to obtain information from the patient. The next step is to communicate the information to the radiologist.
- Although, Radiologist are present for a few medical imaging exams as a whole the interaction is minimal.
- The communication on the Technologist needs to be assertive and proactive as the responsibility is for the quality of care to the patient.
- If face to face is not an option an optimal method of communication is the use of the PACS and EMR system.

Pacs and the EMR System

- The digital systems have communication components at all level.
- The digital indicators are a communication of the quality of the x-ray.
- S-values are the digital indicators in the FUGI systems that tell the technologist if the image, based on anatomy, is optimal for diagnostic quality.
- The values are also used in quality control features for the pacs systems and can get scores on the quality of images that the departments are completing as a whole.
- These indicators determine if changes in the preset protocols need to be adjusted.
- Staff needs to communicate changes in digital image quality.

Pacs and the EMR System

- Pacs and the Electronic Medical Record are the Gateway to Technologist and Radiologist Communication.
- The PACS and the EMR systems are two softwares that are bridge the information thru what is called dicom and HL7 links.
- When Radiologist are reading the exams they are reading out of the PACS system. They use a dictating system that once the workflow is completed the full report is loaded into the Electronic Health Record or Epic system.
- The Digital Systems have change the work environment and the relationships between the radiologist and the technologist.
- Medical imaging workflow has increased with an increasing pressure for fast turn around from imaging to report.
Before and After the PACS System

The radiology workflow has changed in the last ten to fifteen years with the implementation of the PACS and EMR systems. Technologists still have a duty to fully communicate with the radiologist which can be done utilizing the PACS and EMR system. The systems have alerts and journal entry components that will populate at the radiologist's workstations. The communication in the systems aids the radiologist in accurately reading the exams and properly diagnosing the patients.

Pacs and the EMR System Communication

Medical Imaging

Medical Imaging is one of the core departments of the hospital. This means that the Imaging Department has a huge impact on the patient experience. Patients are surveyed on their experience and those results are reported to the government. Hospital reimbursements from government funding can be affected by the results of the surveys.
References

