Learning from Adverse Events: An In-Service Opportunity for Radiology Staff

Understanding the types of patient safety events that are reported broadens a healthcare organization's ability to educate staff about those events and the potential patient harm associated with them. As a supplement to facility-specific events, radiology leaders and educators are encouraged to share the statewide reported events provided below with staff and to use them as a teaching opportunity to ensure that appropriate safety policies, procedures, and systems are in place within all realms of radiology. These events have been similarly categorized to the events in the *Pennsylvania Patient Safety Advisory* articles, "Applying the Universal Protocol to Improve Patient Safety in Radiology Services," and "Adapting Verification Processes to Prevent Wrong Radiology Events."

Failure to Verify Patient Identification

Teaching points:

- Use two patient identifiers before performing any radiologic procedure.
- Do not use the patient's room number as an identifier because the patient's location may change during their stay.
- Use active rather than passive communication by involving the patient or the patient's representative in the identification process.

The following edited examples were reported to the Pennsylvania Patient Safety Authority:

> *Patient was taken by transport for chest x-ray. The wrong patient was brought down [to the radiology department]. The x-ray was to be done on the patient's roommate. The correct chart was brought down, but it was the wrong patient. The patient was returned to his room and the correct patient was x-rayed.*
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> *There were two patients [A & B] with same last name. The wrong patient [A] was taken to ultrasound for an exam. The examination was completed. The technologist only checked the last name for identification. The error was discovered when the physician asked patient [B] about the results and the patient said it was never performed.*
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> *Patient [A] was in the room when an order for a chest x-ray was written; she was then moved to another room. When the [radiology] technologist came up to do the x-ray, it was taken on patient [B], who was now in the room. The demographics were incorrect for patient [B]. The mistake was recognized and demographics changed to show patient [B's] actual information. There was also a chest x-ray ordered on patient [B]. The other patient [A], whom they originally intended to x-ray, was [then] x-rayed.*

Incorrect Order or Requisition Entry

Teaching points:

- Ensure that the electronic order(s) or radiology requisition form(s) are compared to and consistent with the order in the patient's medical record.
- Look at the patient care notes to ensure that the examination is appropriate for the patient.

The following edited examples were reported to the Authority:

> *Patient came to x-ray for scheduled chest and lumbar spine x-rays. Staff performed the exams listed. Upon trying to complete the paperwork, it was noticed that the lumbar spine exam had been cancelled. Since the system changed, we no longer receive cancellation notices and we were not aware of the cancelled exam until afterwards.*
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> *An order was placed by the intensive care unit for a CT [computed tomography scan] of the thoracic spine. When the patient was brought down [to radiology], the order was written for a cervical spine. The patient was put on the table and scouted. The physician's office was called because the order did not specify CT. The doctor stated he wanted plain x-rays of the cervical spine. The patient was taken to the x-ray [unit] for his films. The nursing unit was notified that they had placed the wrong order.*
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> *A patient arrived at the radiology front desk for a scheduled appointment. The patient handed the medical office assistant her request and the assistant logged her as arrived for a two-view chest x-ray. While preparing to scan the request, the assistant noticed that the exam was for a chest CT scan and not a chest x-ray. The patient had already been taken into the x-ray room and the images acquired.*

Incorrect Order or Patient Identification Originating from the Physician's Office

Teaching points:

- Ensure that the patient's prescription for radiologic services is consistent with the procedure(s) scheduled.
- Engage the patient in the purpose of the examination.
- Question the referring physician if there are any discrepancies between the patient's prescription, symptoms, or expectations.

The following edited examples were reported to the Authority:

> *The referring physician and patient did not realize that a bone density scan had been performed within the last three years. The scan was started, which recalled a prior study in the computer from three years ago. The scan was stopped and the physician was called. The study was then cancelled.*
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> *A patient scheduled for cervical spine MRI [magnetic resonance imaging scan]. The procedure was initiated and a magnetic void artifact was noted in upper chest area. The patient was noted to have a pH monitoring device inserted in her esophagus during a [recent] procedure. The MRI technologist spoke with the doctor's office, who said the patient was given verbal and written instructions regarding no testing within 30 days of her procedure. The patient did not provide the MRI technologist with this information. The MRI was canceled and rescheduled for a later date.*

Failure to Follow Site and Procedure Verification or Procedure Qualification Processes

Teaching points:

- Review accepted facility-specific protocols for site verification, such as markers, patient confirmation, and medical record documentation, for procedure location. Note the record for any possible contraindications to prescribed procedure (e.g., pregnancy tests, renal function).
- Consider implementing elements of the Universal Protocol for Preventing Wrong Site, Wrong Procedure, Wrong Person Surgery™ into routine patient and site verification practices.

The following edited examples were reported to the Authority:

> *Right foot and right heel [radiographs] were ordered. Radiographs were taken on the left foot and left heel. The order was verified with the cast room technologist after the mistake was discovered.*
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> *The patient's mother stated the child fell on his left side and needed a left clavicle x-ray. The child was upset and crying during the procedure. The physician's office had ordered [the x-ray] for the right clavicle. The patient returned for left [clavicle] x-ray.*
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> *A patient came to the emergency department with a brain bleed. He had a history of diabetes and hypertension. A CT of pelvis and abdomen with contrast was done but not ordered for him. He developed renal failure requiring dialysis treatments X 3 and monitoring in the ICU [intensive care unit] for 6 days.*

For more information, visit http://patientsafety.pa.gov

This sample policy accompanies
Adapting verification processes to prevent wrong radiology event
Pa Patient Saf Advis [online]. 2018 Sep [cited 2018 Sep 20].
Available from Internet:
http://patientsafety.pa.gov/ADVISORIES/Pages/201809_WrongSiteRadiology.aspx