

Contrast Media Allergy Review Process Improvement

Problem

Patients with a documented history of allergy were occasionally re-challenged with the offending contrast media unintentionally or without premedication in the outpatient setting. Information on patient medication allergies, the nature of the reaction, and the causality of the reaction is documented in cPOE, but not readily available to the technologist in Radiology using the Radiology Information System.

Aim/Goal

Establish a new process to prevent unintentional contrast media re-challenge in patients with a history of previous adverse drug event.

Team

Camille Collette, RN, MS
Donna Hallet, BS, RT(R)
Jonathan Kruskal, MD, PhD
Yolanda Milliman-Richard, RN
Tim Parritt, BS, RT(R) (CT)
Valerie Portway, BS
Karen Smethers, PharmD

Patient Safety Coordinator, Risk Management
Director of Operations, Department of Radiology
Assoc. Radiologist-in-Chief for Quality Affairs
Nurse Manager, Department of Radiology
Clinical Manager, Department of Radiology
Lead Applications Developer, Information Systems
Clinical Pharmacy Coordinator, Med. Safety

Analysis

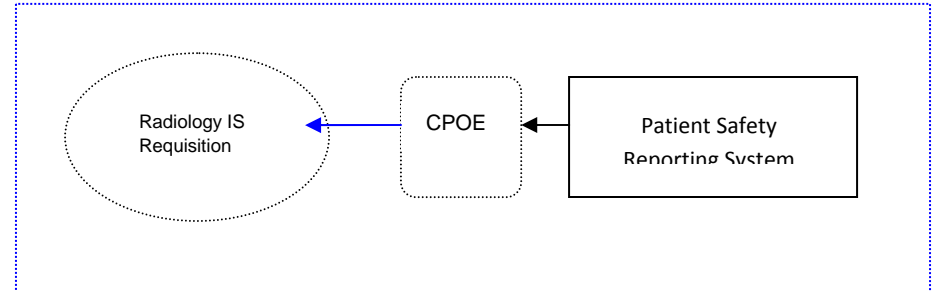
A review of the medication use process for prescribing contrast media in the outpatient setting was performed with an interdisciplinary team to identify opportunity for process improvement. Key failure modes identified include the following:

- Patients may not recall allergy history and communicate this information to the Radiology staff.
- Radiology technologist does not use the cPOE system during normal course of business where allergy information is routinely documented.

Allergic events to contrast media are reported to the Patient Safety Reporting System by Radiology staff. All adverse drug reactions are then reviewed by HCQ, Radiology, and Pharmacy staffs who update the patient's allergy information updated in cPOE. However, patient allergy information documented in cPOE does not communicate with the Radiology Information System (RIS).

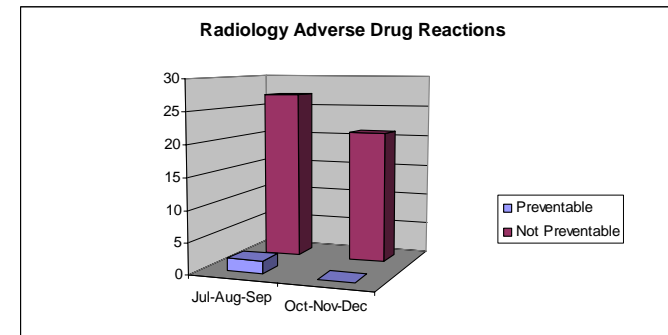
Interventions

Patient allergy information documented in cPOE was linked to the Radiology information requisition printed. This allows the Radiology technologist to readily view the information in cPOE along with the patient reported history of medication allergies on the day of the radiology exam. The Radiologist is contacted if any questions arise about a patient's allergies. A clinical pharmacist is also on call at all times to help clarify medication concerns.



Results

Direct observation of the Radiology technologist during February 2008 was done on both the East and the West campus locations. The Radiology technologists were seen reviewing the patient questionnaire as well as the RIS requisition form for patient allergy information in all cases. The technologists were able to articulate that they would contact a Radiologist for any question of contraindications to performing the diagnostic test. The Radiology technologists were also able to demonstrate the process for documentation of a patient allergic event on the Patient Safety Reporting System. There have been no further reports of administration of contrast media in patients with a documented history precluding re-challenge.



Beth Israel Deaconess
Medical Center



A teaching hospital of
Harvard Medical School

THE SILVERMAN INSTITUTE
For Healthcare Quality and Safety

For More Information Contact

Karen Smethers, PhamD, BCOP
ksmether@bidmc.harvard.edu