CDI QUALITY INSTITUTE

Advisory

Labeling of Medications during Interventional Radiology Procedures

Thomas J. Gilbert MD MPP
01/15/2018

Accreditation Organizations (AAAHC and Joint Commission) and Patient Safety Societies uniformly recommend labeling syringes containing medications during radiology injection procedures.

The following are excerpts from the relevant accreditation organizations and specialty societies:

Accreditation Association for Ambulatory Health Care (AAAHC):

11. H. All injectable medications drawn into syringes and oral medications removed from the packaging identified by the original manufacturer must be appropriately labeled if not administered immediately. Medications withdrawn from manufacturer packaging are, at minimum, labeled with the name and dosage if not immediately administered.

The Joint Commission (TJC):

NPSG.03.04.01- Label all medications, medication containers, and other solutions on and off the sterile field in perioperative and other procedural settings. Note: Medication containers include *syringes*, medicine cups, and basins.

Elements of Performance for NPSG.03.04.01

1. In perioperative and other procedural settings both on and off the sterile field, label medications and solutions that are not immediately administered. This applies even if there is only one medication being used.
2. In perioperative and other procedural settings both on and off the sterile field, labeling occurs when any medication or solution is transferred from the original packaging to another container.
3. In perioperative and other procedural settings both on and off the sterile field, medication or solution labels include the following: Medication or solution name, Strength …
4. Label each medication or solution as soon as it is prepared, unless it is immediately administered. Note: An immediately administered medication is one that an authorized staff member prepares or obtains, takes directly to a patient, and administers to that patient without any break in the process.

Ambulatory Surgical Centers (ASCs) which are approved by the federal Centers for Medicare and Medicaid (CMS):

Any pre-filled syringes must be initialed by the person who draws it, dated and timed to indicate when they were drawn, and labeled as to both content and expiration date.

Institute for Safe Medical Practices (ISMP):

PROBLEM: Just when you think you've made significant headway with a persistent unsafe practice, an error creeps up and disappointment sets in. The error serves to remind you just how vulnerable patients are to human error, and to expose the fact that strategies you may have thought were in place to prevent the error are either ineffective or not implemented in all areas of the organization. The error [we would like to address] involves *the mix-up of two solutions in unlabeled containers on a sterile field*. The strategies required to prevent these errors are straightforward and relatively simple—***accurate and complete labeling of containers for all solutions and medications on the sterile field, in every procedural area, every time***. This applies not only to the operating room (OR) and anesthesia, but also to the holding area and post-anesthesia care unit, and to other procedural areas including ambulatory surgery, ***radiology***, invasive cardiac labs, labor and delivery rooms, emergency department, endoscopy units, treatment rooms, as well as patient care units where procedures may occur at the bedside.

ISMP cites several high profile patient reports and then goes on to conclude: The repetition of this error suggests that healthcare providers have lost the perception of risk associated with unlabeled products, mistakenly believe the risk is insignificant or justified, or have forgotten to implement effective prevention strategies in all procedural areas.

- First, ***normalcy bias may cause some to falsely believe that an error would never happen to them.***
- [Second, providers have] the mistaken belief that labeling is not always necessary [with] the rationalization of faulty strategies***. These faulty strategies may include identifying products by where they are placed on the sterile field*** and overreliance on immediate use before the container leaves one's hands.
- [Third,] unlabeled containers may be considered ***"someone else's problem,"*** a phenomenon similar to ***bystander apathy that causes people to ignore a problem because they believe it is not relevant to them, unlikely to happen, something they can't fix, or someone else's responsibility to fix***.
- [Finally,] some may believe they have implemented the perfect labeling procedures only to find partial compliance because the task is tedious, error-prone, or impractical without system changes.

SAFE PRACTICE RECOMMENDATIONS: To reduce risks associated with unlabeled syringes, *provide labels.* Commercially available labels for syringes should be provided and regularly restocked in all drug preparation areas (including radiology, nuclear medicine, and other areas where medications are administered). Offer nurses the opportunity to assess several label formats and select one standard format that best meets their needs. Tape is not suitable for labeling syringes.