PHARMACY NEWSCAPSULE

DEPARTMENT OF HEALTH SERVICES / DIVISION OF QUALITY ASSURANCE

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APP For That!

Microsoft Teams

Did you ever want to show your work peers something that you have on your phone or computer without all having to huddle around?

As surveyors we all have the Teams app on your phone and computer. You can have a quick meeting and share your screen within Teams. Some staff have begun doing this out on survey during team meetings to facilitate decision making. Give it a try!

IV Medication Errors by Doug Englebert, R.Ph.

All kinds of medications are given intravenously. The medication types range from antibiotics to agents used for paralysis during surgery. Some of these medications are given by direct injection through a syringe and other medications are added to intravenous solutions (IV bags) and infused over a period of time. Often these medications come in vials from the manufacturer and are prepared for administration by pharmacists, pharmacy technicians, anesthesia technicians, nurses, physicians and others.

What types of problems have been documented?

One type of error or problem that has occurred is look-a-like/proximity errors. Many vials of IV medications can look the same. The vials may have similar colored caps, similar colored labeling and similar label font size. This can lead to the same medications but different strengths being mixed up or can lead to completely different medications being mixed up. For example, vancomycin, an antibiotic, comes in vials containing 500 mg and 1-gram sizes. If these vials come from the same manufacturer, they may look similar. If the medications are stored alphabetically, they may be stored right next to each other.

IV Medication Errors cont.

These factors may increase the likelihood that the wrong vial is picked, prepared, and passed through the medication checking system to administration, leading to a medication administration error.

This phenomenon has occurred with items like heparin and sodium chloride with significant adverse outcomes. For example, heparin, a medication used to thin the blood, may come in 10 units per milliliter, 100 units per milliliter, 1000 per milliliter, or 10,000 units per milliliter. These strengths are used for very different purposes. However, when placed on the shelf next to each other and having a similar appearance they can easily be mixed up. Significant bleeding issues could occur if too much of the drug was used when the wrong strength was chosen.

Sometimes these types of errors happen with two very different medications. For example, one historically reported error involved the medications vecuronium and valproate. These two medications were stored alphabetically next to each other. The vials both had red caps and were approximately the same size. In this case the vial of vecuronium was used to make a valproate dose. The incorrect medication made it through the medication check processes and was administered. The patient became paralyzed and experienced difficulty breathing. Fortunately, the patient was able to use the call button and averted a significant negative outcome. The error was later identified, and part of the analysis focused on the packaging and storing of these vials of medication.

So what has been done in an attempt to avoid these types of errors?

In some cases, manufacturers of medications have changed packaging to make vials look different, including changing colors and labeling. In some cases warning labels have been used.

Providers have implemented changes like storing the medications in different areas or adding overwrap packaging to alert persons preparing the medications. In some cases, the use of bar code technology has been implemented. In other cases, the process of checking prepared medications may require all utilized material to be presented in a separate container for independent verification. For certain high-risk medications like concentrated heparin, paralytic agents, and chemotherapy, providers may have increased independent verifications and security of the medications to prevent mix up errors from occurring.

As with many medication errors, sometimes providers, consumers, and regulators may become complacent, thinking that these types of errors can’t occur in Wisconsin. However, these types of medication errors have occurred in Wisconsin. Some of the errors observed on surveys include immunizations and insulins being mixed up.

As a surveyor what would you expect to see facilities doing to prevent these errors from occurring?

Facilities should have in place a quality assurance process that includes looking at medication errors or near misses, errors that almost occurred. Facility staff should evaluate near misses and medication errors to determine the factors associated with them. Finally, the facility should implement changes to its medication preparation and administration systems and monitor the effectiveness of the changes. For example, sometimes these errors occur with immunizations and insulins because someone places the vial back into a box, but they place it in the wrong box. The next person administering those medications may read the box, grab the vial and administer the drug without reading the label on the vial. A simple way to fix this is not to store the vial in the box it came in; store the vial and discard the box.

Medication Stability in Food By Doug Englebert, R.Ph.

Recently there have been more questions related to crushing medications and placing the medications in food. In these instances, typically facility policies related to if a physician order is needed or who will review and authorize the medications to be crushed and placed in food will apply. This article is focused on the act of mixing the medication with food and considerations that may apply.

As always, medications cannot be hidden in food because a person is refusing the medication. A court order would be required to overcome a person's right to refuse medications.

There are some medications that cannot be given with food and therefore mixing in applesauce, or any food, would be an issue. This may be due to medication stability, or it may be because the medication will not be absorbed when given with food.

Outside of those medications with specific warnings not to be given with food, medication usually can be mixed with food and if the mixture is taken immediately stability is usually minimally affected. However, in some cases crushed medication is mixed with applesauce or other foods which then may be set aside for a period of time for some reason. Applesauce and other foods may have a characteristic which will start breaking down the medication which may affect the stability of the medication and impact the medication's effectiveness.

The best situation is to avoid mixing medication in food and setting it aside or storing it for later use. If allowed, staff should be directed to use medication mixed with food immediately. If medications do need to be set aside staff should be contacting their pharmacist for guidance.

In some cases, facilities will crush a medication in a bag or some other container. If for some reason the crushed medication cannot be given at that time and it is not mixed with food, it is possible to set aside the crushed mixture until the patient is ready to take the medication. A procedure to identify the bag of crushed medication must be in place.

Facilities should also work with their pharmacy providers to ensure a medication is safe to be crushed or if there are alternatives that can be used if swallowing a tablet or capsule is a concern.

FAQs

1. If a resident was admitted in August 1, 2022 and began taking Celexa for depression, is it expected that the facility attempts a Gradual Dose Reduction (GDR) or provide a statement indicating why a GDR would be contraindicated?

   In a nursing home if the facility has treated depression in this resident since August 2022 and it comes to the ninth month (May 2023 in this case), they need to provide clinical contraindication in order to avoid the dose reduction. The facility can do this by providing clinical rationale and standards of practice that support treatment beyond nine months. A surveyor would expect to see information that shows the antidepressant is providing benefit and side effects are minimized or absent. This would be the clinical rationale. Various standards of practice for moderate depression typically would support treatment beyond 12 months. The bottom line is that at nine months the facility should have a progress note from the physician and others that supports that the drug is working and that length of treatment plan is in line with standards of practice. In this example, if all the facility has documented is that Celexa is being given for depression and there is no monitoring of effectiveness or side effects, then F758 may be cited for inadequate monitoring and failing to consider a dose reduction.

2. Where do I find registry information on medication aides?

   There are various requirements for medication administration by unlicensed staff that are based on the facility type.

   For Community Based Residential Facilities (CBRF) in order to administer medications an unlicensed person needs to take the CBRF medication training and be on the CBRF registry. There are individuals that are exempt from the medication training as provided in DHS 83 and these individuals will not be on the CBRF registry.

   For Hospice and Nursing Homes, unlicensed persons who take the required state approved medication administration training they are placed on the nurse aide registry with a medication aide designation.

   Remember that hospice and nursing home medication aides must work 100 hours each calendar year and have four hours of medication related in-service each calendar year to maintain status. The facility must keep the last three years of records documenting the hours worked and in-service attended. They do not submit that information to the registry but will have the records to present to surveyors if needed.

Note hospice and nursing home medication aides are exempt from the CBRF training so CBRF surveyors can also look at the nurse aide registry to confirm status as a medication aide for purposes of the exemption provision in DHS 83.