PATIENT SAFETY
FEEDBACK

Patient Safety Reporting System
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FEEDBACK shares excerpts of reports sent by VA personnel to PSRS. Actual quotes appear in italics. Created by an agreement between NASA and the VA in May 2000, PSRS is a voluntary, confidential, and non-punitive reporting system. PSRS encourages VA personnel to describe safety issues from their firsthand experience and to contribute their information to PSRS.

Clinical Accuracy Is Essential To Patient Safety Efforts

Recent PSRS reports describe problems with insertion of feeding tubes, with correct identification of names and dosages of medications, and verification of patient identities. They also identify issues relating to awareness of duplicate or conflicting drug and laboratory orders.

Hard to Swallow

A recent research study found 2% of patients with feeding tubes had intrabronchial malposition during insertion (J Am Coll Surg July 2004). A physician reporter described such an event:

- *The KEO tube (a nasal feeding tube) entered the trachea rather than the esophagus, then into the bronchus, then perforating the lung with a resultant pneumothorax.*

The reporter's facility responded to this event by adopting a new procedure:

- *The KEO tube is introduced to a depth of 30cm. This is far enough to determine tube location (trachea versus esophagus). Then a disposable anesthesia end-tidal CO_2 monitor is placed over the end of the KEO tube. If CO_2 is present, then the tube is in the trachea and withdrawn. If no CO_2 is present, then the tube is advanced into the GI tract.*

Spell-Alike Sound-Alike Medications

Two reports from nurses identified similar near-miss events. The first report focused on an outpatient's mailed medication.

- *Atarax* [hydroxyzine], *an anti-histamine, anti-anxiety medication was ordered in computer. Two days later, Pharmacist changed the medicine to hydralazine (a vasodilator for hypertension)... Medication was mailed to patient at home.* [The patient] *brought it in to check with reporter as* [the patient] *had not previously seen this medication.*

The second incident occurred in an inpatient setting:

- *The order hydroxyzine 10 mg. 1 tablet b.i.d. In cassette it was hydralazine 10 mg. tablet. ...Pharmacy notified... The correction by the Pharmacy was timely.*

The reporter noted that this mistake was "a recurrent event."

Wear Time of Wristbands

A recent journal article advised periodic replacement of wristbands as a best practice recommendation (Jt Comm J Qual Saf July 2004). A VA laboratory technician contributed data gathered while monitoring changes in printing equipment for patients' wristbands:

- [The new equipment] *causes poor quality illegible smudged wristbands.*
- *Staff reports average wear time as 3 days.*
- *The average length of stay for patients is 7-10 days or longer if intermediate nursing home patient.*
- *Frequent band changes required.*

Changing Places

The initial 2005 JCAHO National Patient Safety Goals call for health care workers to use at least two patient identifiers prior to providing treatments or procedures. An imaging technician reporter described an event that omitted that step:

- *The (student) technologist that called the patient's name and escorted them to the room did not properly identify this patient. (Ask entire name and social security number.)*
- *The staff technologist assumed the student had the correct patient and they proceeded with the exam.*
- *The mistake was discovered when the receptionist questioned how long it would be before the "actual patient" was done.*

Immediate corrective action was taken and the examination performed on the proper individual.

Decimal Places and Decimal Points

An analysis of over 2000 prescribing medication errors found 17.5% were due to mistakes in calculations and decimal points (JAMA Jan 1997).
A more recent study of tenfold errors in medication dosing focused on legibility problems with handwritten physician orders (Ann Pharmacother Dec 2002). However, with computerized physician order entry, new legibility issues can arise in the drug administration phase. Two reporters wrote about such events.

In the first situation, a nurse observed that staff looked up meds on the BCMA monitor when the printer was malfunctioning. One patient was receiving a drug to treat mental illness.

- *Medication ordered. Olanzapine 2.5 mg po every 6 hours. Order in BCMA looked like 25 mg po every 6 hours. Decimal point was nearly impossible to see.*

The potential for a medication error was increased when the Pharmacy, not having the 2.5 mg dose in stock, put multiple 5 mg tablets in the patient's medication drawer.

- *Our staff could easily have thought 5 tablets were to be given to equal 25 mg.*

After the error was discovered by the reporter, Pharmacy clarified the order:

- *Order written in red that 1/2 tablet to be given from 5 mg tablet.*

To further prevent such events, new monitors and printers were purchased. Nurses added an educational component:

- *Nursing service notified all staff: 'Always stop and check if giving more than 2 tablets to any patient!'*

In the second situation, a physician assistant wrote about a post-operative anti-coagulation medication:

- *Entered postop orders into CPRS. Lovenox dose wanted was 15 mg. When 15 mg is typed in, the computer defaults to 150 mg. The zero is shaded by a blue color and the 15 is shaded by a white color. I did not detect this until 4-5 days later! I happened to be reviewing orders and found the error.*

Preventing Dispensing Errors

A pharmacist reporter focused on preventing dispensing errors:

- *Pharmacy personnel must rely on multiple visual checks to prevent the wrong drug reaching administering site... Measures that minimize interruptions, improve readability of package labels, and prevent proximal storage of similarly labeled containers or high-risk drugs are useful in decreasing the chances of selecting the wrong drug.*

In the reporter's Pharmacy, measures have been implemented to reduce mistakes:

- *Decrease interruptions to Pharmacy personnel during the dispensing process.*
- *Encourage Pharmacist and technician to 'take a time out' between packaging and delivery to the floor. This will allow 'fresh eyes' to compare drug selected with dispense drug ordered.*
- *Use a mixture of upper and lower case letters to label unit dose packets. This will draw attention to different dosage form, strength, or like-sounding or appearing name.*
- *As IV bags with barcodes imprinted by the manufacturer arrive on station, they will be placed immediately into use. This will eliminate manual barcode labeling.*

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