

Safety First Alert

Massachusetts Coalition for the Prevention of Medical Errors

January 2001

This issue of *Safety First Alert* is a publication of the Massachusetts Coalition for the Prevention of Medical Errors - a unique partnership of providers, clinicians, and regulators - formed in 1997 to improve patient safety and reduce medical errors. *Safety First Alert* is published periodically to alert the health care community to strategies for preventing errors known to have occurred in Massachusetts and around the country. For further information, contact Leslie Kirle, 781-272-8000, ext. 124; fax 781-270-0605; email Lkirle@mhalink.org.

Look-Alike/Sound-Alike Medication Errors

A number of errors have been reported as being the result of look-alike and sound-alike drug names. A recent article in the journal Hospital Pharmacy lists over 600 pairs of drug names that can be the source of look-alike or sound-alike errors. In some cases, this problem is further compounded when the doses for these drugs are similar. These errors can occur at any point in the medication use system. Look-alike packaging also contributes to medication errors. Visit www.usp.org/pubs/review/rev_066.htm for an updated list of drugs with similar names. This Safety First Alert lists the opportunities for errors and suggested interventions.

Prescribing Errors Associated with Look-Alike/Sound-Alike Drug Names

Errors can occur when a drug name is not written clearly and is misinterpreted by a pharmacist or nurse. The recipient of the order will read the name that s/he is most familiar with. When accepting a verbal order, a pharmacist or nurse may not understand or be familiar with the drug name and again 'hear' what he or she is most familiar with.

What can you do to minimize the opportunity for error?

- Write legibly. Include brand and generic name. Also include indication when appropriate. Write clearly whether on an inpatient order or on a prescription.
- Communicate clearly. Take your time in pronouncing the drug name during oral communications. Ask that the recipient of the oral communication repeat the drug name and dose.
- Use both brand and generic names for those drugs that you may know to be problematic.
- Specify the dosage form and the dose, each of which may help others to differentiate look-alike and sound-alike names.
- Educate the patient as to the name of the drug.
- Do not use abbreviations (e.g. IL-II may be read as IL-11)

Dispensing Errors

Dispensing errors can occur when look-alike names appear on the selection screen during computer order entry. They may also occur as items are selected from the storage bins for distribution. Pharmacy prepared products may also contribute to errors when all of the labels look the same and it is difficult for a nurse to differentiate products.

What can you do to minimize the opportunity for error?

- Minimize the number of look-alike names that appear on the selection screen on order entry.
- Separate look-alike drug packages in storage areas.
- Repackage products in a different outer wrapper to differentiate products
- Ensure that labels highlight the active ingredients in a pharmacy prepared product.
- Use different fonts and bold print on pharmacy generated labels.
- Adopt what has been learned in industry: emphasize the difference in the drug name. e.g. DOPamine versus DoBUTamine.
- Extend error-proofing techniques to the patient care areas. Separating items in the pharmacy but not on the unit will not minimize the opportunity for errors.
- Check the diagnosis prior to dispensing medications that have been identified to have the potential for mix up because of look-alike names.
- Check the appropriateness of dose for the drug dispensed.

Administration Errors

Nurses may administer the wrong drug if the name on the label is confusing and may be one half of a look-alike pair. When taking verbal orders, a nurse may not understand the prescriber and write down the incorrect medication name. Selection errors from a patient bin or from an automated dispensing machine that uses a matrix or open drawer set up is also an opportunity for error.

What can you do to minimize the opportunity for error?

- Ask that products be repackaged or warning labels be added for look-alike drug names and packages.
- Repeat the drug name and consider spelling the name, when taking a verbal order. Verbal orders should be limited to emergency situations only.
- Ensure that look-alike packaging is stored separately on the units or in automated dispensing machines.
- Collaborate with Pharmacy to design a better label for pharmacy prepared products if the current label is a problem.
- Involve the patient. The better educated the patient is regarding his/her medication, the more likely that an error will be intercepted.
- Check the diagnosis prior to administering medications that have been identified to have the potential for mix up because of look-alike names.
- Check the appropriateness of dose for the drug to be administered.
- Take advantage of automation by incorporating additional features in automated dispensing cabinets that ask the nurse to confirm the diagnosis of the patient.

Acquisition

One of the best ways to minimize errors is to prevent the opportunity. This can be accomplished by assessing products as they are added to the formulary and as products are purchased. Group purchasing organizations may inadvertently contribute to the problem as they try to obtain better pricing by switching manufacturers or packagers.

What can you do to minimize the opportunity for error?

- Analyze drug names as new products are added to the formulary. Consider the opportunities for errors and decide on preventive measures if the product is added.
 - Recommend prescribing strategies such as including brand and generic name for problem drugs.
 - Make a poster board containing samples of all of the vials and ampules in the pharmacy, listing the drugs in alphabetical order. Then compare vials for look-alike packaging.
 - As new products or packages are introduced, compare them with existing packaging. Determine the opportunity for error and decide to change one of the products if necessary.
 - Report problems to the group purchasing organization.
 - Be aware of drug names with confusing suffixes. Manufacturers add the letters 'CR', 'XL' or some other designation to an existing product to denote a slow release dosage form of the product.
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Efforts are underway to minimize the number of look-alike sound-alike names for new drugs. Many have testified in front of the FDA regarding the number of opportunities for errors under the current structure. Manufacturers are taking advantage of groups that evaluate drug names, comparing them with other names that are currently on the market. If you note a problem, report it to the Institute for Safe Medication Practice (ISMP). ISMP will quickly disseminate the information through its newsletter.

Special thanks to Frank Federico of the Risk Management Foundation for developing this Safety First Alert.

The Massachusetts Coalition for the Prevention of Medical Errors was established to develop and implement a statewide initiative to improve patient safety and minimize medical errors. The Goals of the Coalition are:

- To establish a mechanism to identify and implement best practices to minimize medical errors;
- To increase awareness of error prevention strategies through public and professional education;
- To identify areas of mutual interest and minimize duplication of regulatory and Joint Commission for the Accreditation of Healthcare Organizations (JCAHO) requirements so that efforts are focused on initiatives that can best improve patient care.

List of Participating Member Organizations:

- AARP
- American College of Physicians
- Boston University School of Medicine Center for Primary Care
- Harvard Risk Management Foundation
- Health Care Financing Administration Regional Office
- Harvard School of Public Health
- Institute for Healthcare Improvement
- Joint Commission on Accreditation of Healthcare Organizations
- Massachusetts Association of Behavioral Health Systems
- Massachusetts Board of Registration in Nursing
- Massachusetts Board of Registration in Pharmacy
- Massachusetts Board of Registration in Medicine
- Massachusetts Department of Public Health
- Massachusetts Extended Care Federation
- Massachusetts Hospital Association
- Massachusetts Medical Society
- Massachusetts Nurses Association
- Massachusetts Organization of Nurse Executives
- Massachusetts Peer Review Organization
- Professional Liability Foundation
- PRO Mutual Group

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