



Who we are...

Since 1989, Med League Support Services, Inc. has aided attorneys in 37 states. We perform these services:

- Analyze medical records
- Develop case chronologies
- Screen malpractice cases for merit
- Prepare PowerPoint presentations for settlement negotiations or trial
- Provide literature searches
- Prepare pain and suffering reports
- Transcribe handwriting
- Prepare life care plans
- Prepare Life Activity Calendars
- Assist with demonstrative evidence
- Prepare medical illustrations
- Assist with preparation of demand letters and settlement brochures

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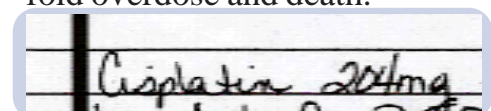
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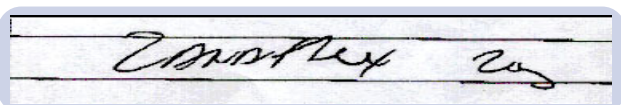
What Does that Medication Order Say?

The prevalence of medication errors in hospitals and other healthcare organizations is a topic that has in recent years evolved into a major national health concern. Medication prescription and administration are routine aspects of medical, nursing, and pharmaceutical practice, and yet they have the potential to result in permanent injury or death. Some of the most successful litigation against healthcare providers concerns medication errors. It is easier to establish the standard of care for medication prescribing, dispensing, and administration than it is for many other aspects of medical practice. This article focuses on the risks associated with interpreting medication orders written by physicians and nurse practitioners. The nurse is expected to know enough about the medications that are to be given to the patients in order to question erroneous orders or identify areas of concern or inaccuracy. The pharmacist is expected to interpret the order and dispense the correct drug and dosage. A medication error may have no impact on the patient; on the other hand, a serious error can kill a patient.



A 1979 study showed that it was difficult to accurately interpret about half of all physicians' handwritten orders.¹ With direct physician computer order entry limited to a small number of medical facilities, not much has changed in the last 25 years. The difficulty in interpreting handwriting wastes nursing staff time when nurses consult each other to come up with a best guess about an order before calling the prescriber for clarification. Even well-written orders may be misinterpreted because of variations in the shapes of characters or if the tail or loop of handwritten letters above or below the order interferes with interpretation.² A line may interfere with the observation of a decimal point. The order below for 20.4 mg of Cisplatin (chemotherapy) was interpreted as 204 mg, resulting in a ten fold overdose and death.





Unclear handwriting led to a ten-fold overdose of Zanaflex, shown above. It was ordered as 2 mg but interpreted as 20 mg. Fortunately, this did not result in harm to the patient.

Confusing abbreviations may also result in medication errors. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has put teeth into a requirement that healthcare providers not use dangerous abbreviations in medical records. JCAHO accredits hospitals, nursing homes and a broad range of other healthcare organizations. Beginning in 2002, JCAHO identified national patient safety goals for healthcare organizations seeking accreditation by JCAHO. (See sidebar, *2004 National Patient Safety Goals*.) One hundred percent compliance in all forms of clinical documentation with a reasonably comprehensive list of prohibited dangerous abbreviations, acronyms, and symbols is the long-term objective of this requirement. Organizations surveyed in 2004 will be considered to be in compliance with this objective if the following conditions are met:

- Use of any item on the list is sporadic (less than 10 percent of the instances of the intended term are abbreviated or symbolized) AND
- Whenever any prohibited item has been used in an order, there is written evidence of confirmation of the intended meaning before the order is carried out AND
- The organization has implemented a plan for continued improvement to achieve 100 percent compliance by the end of 2004.³

Attorneys with experience reviewing medical records will recognize many of these commonly used symbols and abbreviations on the mandatory JCAHO “do not use” list. Each JCAHO-accredited organization must include these items on their “do not use” list beginning 1/1/04.

JCAHO Do Not Use List

1. U (for unit) can be mistaken for zero, four, or cc. For example, Regular Insulin 10 U has been interpreted as Regular Insulin 100 units. U should be written out as unit.
2. IU (for international units) has been mistaken for IV (intravenous) or 10. For example, Vitamins D, E, and A, ACTH, and PPD skin tests are all ordered in international units. IU should be written as “international unit.”
3. Q.D. (every day) and Q.O.D. (every other day) are mistaken for each other. The period after Q. in Q.D. can be mistaken for an “I”, making this Q.I.D. for four times a day. For example, Librium 50 mg Q.D., if interpreted as Librium 50 mg QID, would result in a four fold overdose. Q.D. and Q.O.D. should be written out as “daily” and “every other day.”
4. Trailing zeros are written as X.0 mg with the 0 following the decimal point. The lack of a leading zero occurs when an order is written as .X mg. The risk is that the decimal point can be missed. Healthcare providers should never write a zero by itself after a decimal point (X mg is correct) and always use a zero before a decimal point (0.X mg is correct.) The Cisplatin overdose could have been avoided if the person who calculated the dose had rounded it off to 20 instead of keeping it as 20.4 mg.

Medication Errors by Patricia Iyer MSN RN LNCC

If you had to handle a medication error case, would you know what to look for?

This program provides the answers.

See actual medical records from medication errors cases. Recognize the names of the most dangerous drugs and identify the liability theories of inadequate pain management. This new 2004 one-hour long **videotape** or **DVD** is \$99.00 plus shipping and handling. See our webstore at www.medleague.com or call 908-788-8227 8:30 AM-5:00 PM EST. Buy our companion program, *Nursing Home Liability* (normally \$99.00) and **save \$20**. Both programs: \$178 plus shipping and handling. Call for details or see our webstore. We carry over 60 products that will immediately benefit attorneys.

5. Abbreviations for morphine sulfate (MS and MSO4) and magnesium sulfate (MgSO4) can be misinterpreted. The prescriber should write “morphine sulfate” or “magnesium sulfate.”

Effective 4/1/04, each organization must have additional “do not use” items on their lists. Both JCAHO³ and the Institute for Safe Medication Practices (www.ismp.org)⁴ provide lists of dangerous abbreviations.

Practice points:

During the discovery phase of litigation, ask for the facility’s “do not use list.” When evaluating a medication error, determine if the order involved one of the “do not use” items. If the error involved misinterpretation of an item on the “do not use” list, evaluate the prescriber’s order to determine if there is documentation that the order was clarified or confirmed before the order was carried out. An item on the “do not use” list should not be used in any of its forms- upper or lower case, with or without periods. The “do not use” list applies to all forms of handwritten, patient-specific documentation through 2004, such as progress notes, consultation reports, nursing notes, and all other clinical documentation. After 2004, the “do not use” list also applies to preprinted forms which include the prohibited items.

1. Anonymous. A study of physicians’ handwriting as a time waster. JAMA 1979; 242: 2429-30
2. In the long run, penmanship classes for doctors won’t do much for patient safety, www.ismp.org, accessed 1/10/04
3. “Do not use” list required in 2004, www.jcaho.org, accessed 1/10/04
4. ISMP list of error-prone abbreviations, symbols, and dose designations, www.ismp.org, accessed 1/10/04

Med League supplies expert witnesses who are capable of reviewing medication error cases for liability, causation, and damages.

2004 JCAHO Patient Safety Goals

1. Improve the accuracy of patient identification.

- a. Use at least two patient identifiers (neither to be the patient’s room number) whenever taking blood samples or administering medications or blood products.
- b. Prior to the start of any surgical or invasive procedure, conduct a final verification process, such as a “timeout,” to confirm the correct patient, procedure and site, using active—not passive—communication techniques.

2. Improve the effectiveness of communication among caregivers.

- a. Implement a process for taking verbal or telephone orders that require a verification “read-back” of the complete order by the person receiving the order.
- b. Standardize the abbreviations, acronyms and symbols used throughout the organization, including a list of abbreviations, acronyms and symbols not to use.

3. Improve the safety of using high-alert medications.

- a. Remove concentrated electrolytes (including, but not limited to, potassium chloride, potassium phosphate, sodium chloride >0.9%) from patient care units.
- b. Standardize and limit the number of drug concentrations available in the organization.

4. Eliminate wrong-site, wrong-patient, wrong-procedure surgery.

- a. Create and use a preoperative verification process, such as a checklist, to confirm that appropriate documents (e.g., medical records, imaging studies) are available.
- b. Implement a process to mark the surgical site and involve the patient in the marking process.

5. Improve the safety of using infusion pumps.

Ensure free-flow protection on all general-use and PCA (patient controlled analgesia) intravenous infusion pumps used in the organization.

6. Improve the effectiveness of clinical alarm systems.

Implement regular preventive maintenance and testing of alarm systems. Assure that alarms are activated with appropriate settings and are sufficiently audible with respect to distances and competing noise within the unit.

7. Reduce the risk of healthcare-acquired infections.

Comply with current CDC hand hygiene guidelines. Manage as sentinel events all identified cases of unanticipated death or major permanent loss of function associated with a healthcare-acquired infection.



From the President's Desk

**Free DVD or Videotape
Available**



Patricia Iyer was a guest on John Dearie Esq.'s New York cable television show, *The Common Law*, broadcast on November 24, 2003 in New York City, Nassau, Suffolk and Westchester Counties. Pat's topic was "Medical Records: Life Or Death For Any Injury Lawsuit." She showed examples of tampering with medical records and discussed how medical records are used in litigation. Med League has also prepared excerpts of three cable television shows broadcast on *Law Journal Television*. Christopher Naughton Esq.'s show is seen in over 2.7 million homes in Philadelphia, the Greater Lehigh Valley, Western New Jersey, and Delaware. "Patient Safety Standards", "Medication Errors", and "Psychological and Neurological Injuries" are discussed by attorneys and Patricia Iyer.

Contact our office 908-788-8227 or by email at videos@medleague.com for a free copy of these programs. Viewing time is about 1 hour.

Top Quotes for the New Year

After Edison's seven-hundredth unsuccessful attempt to invent electric light, he was asked by a *New York Times* reporter, "How does it feel to have failed seven hundred times?" The great inventor responded, "I have not failed seven hundred times. I have not failed once. I have succeeded in proving that those seven hundred ways will not work. When I have eliminated the ways that will not work, I will find the way that will work."

Several thousand more of these successes followed, and then Edison finally found the one that would work, and invented the electric light. Failure is an attitude, not an outcome.

You can make more friends in two months by becoming interested in other people that you can in two years by trying to get other people interested in you. -*Dale Carnegie*.

To know what is right and not do it is the worst cowardice. -*Confucius*

The graveyards are filled with indispensable men. -*Charles DeGaulle*

Listen very carefully when a client prefaces a comment with, "This may not be important, but.." -*Hammerschmidt and Meador*

From: **Medical Legal Quick Tips: Helpful Hints for Legal Professionals and LNCs**, Second Edition, 2001, published by Med League Support Services, Inc., and available for sale in our webstore.

Med League Support Services, Inc. adds PESI Products to our Webstore

We are pleased to add PESI (Professional Education Systems Inc) products to those of eight other publishers available through our secure webstore. Since it was founded in 1979, PESI has provided continuing education for more than 800,000 professionals including attorneys, judges, paralegals, legal assistants, legal secretaries and healthcare professionals. PESI's seminar handbooks, audiotapes, and law books help busy legal professionals increase their knowledge and stay on top of changes in the field. Med League also sells books, CDs, and audiotapes produced by:

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