
Illegible Prescriptions & Medication Errors

Poorly written prescriptions are a common cause of medication errors.

When he was President of the Wisconsin Medical Society, Jack Lockhart, M.D., gave his members advice that the Ohio State Medical Board would like to echo loudly to its prescribing licensees: **“Many doctors are notorious for their poor handwriting, and it’s time we all concentrate on writing**

prescriptions legibly. Clearer writing is the least we can do as a first step to improve patient safety overall.”

Patient safety is threatened by medical error, and specifically, to a significant degree, medication error. The

Board wants you to understand, and to do what you can to help prevent medication error and patient harm.

In 1999, the Institute of Medicine released its study entitled *To Err is Human: Building a Safer Health System*. That report claimed that between 48,000 and 98,000 people in the United States die each year as a result of errors in the delivery of health care services. “Medication errors alone, occurring either in or out of the hospital, are estimated to account for over 7,000 deaths annually.” The Washington-based Leapfrog Group for Patient Safety reported that more than “one million serious medication errors occur every year in U.S. hospitals.” One could logically conclude that in addition to the 7,000 deaths, medication

errors are likely responsible for many thousands of cases of delay in patients receiving their medication and of non-fatal adverse medical events.

There does not appear to be hard data at this point to break down in a highly detailed manner the causes of medication errors, and there are undoubtedly several different causes and types of such errors, but it is believed that poorly written prescriptions play a significant role in the problem. While acknowledging that there are multiple causes of medication error, the Leapfrog Group cites as one of the common causes of medication errors: “Illegible handwritten

prescriptions by physicians leading to administration of the wrong drug.”

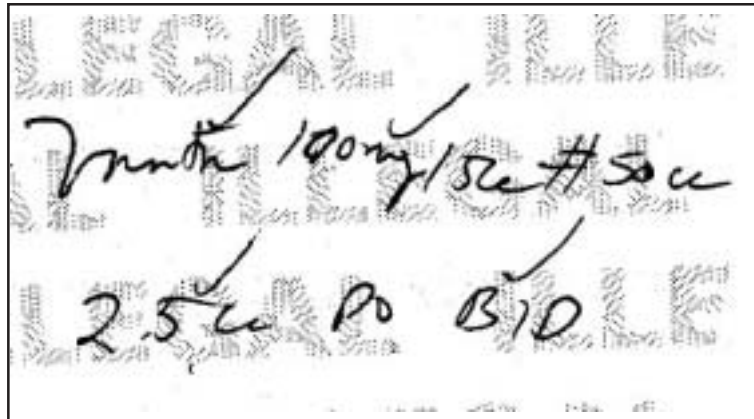
Sandra May, a PharmD, wrote in the October 2002 issue of *Community Pharmacist* that “Misinterpreting even one of the “five rights” of medication safety;

1) right patient,

2) right drug, 3) right dose, 4) right route, or 5) right frequency of administration, can have significant consequences.”

Ohio is not immune to this type of problem. In conversations with the Board of Pharmacy, the Medical Board has learned that, increasingly, pharmacists are coming before the Pharmacy Board for cases in which they have misinterpreted written prescriptions. In one case (see above), a prescription for Vantin was misread by the dispensing pharmacists as Motrin; each pharmacist member of the Pharmacy Board in turn examined the written prescription and saw the same thing.

While pharmacists have a duty to ensure that the drug being dispensed is the same as the



one being prescribed, and that may include contacting a prescribing physician when not sure of what drug the physician intended, this was a case in which there was no such uncertainty. The illegibility was such that it appeared *clearly* to be one drug when it was, in fact, another.

What You Can Do

A number of studies have documented that Computer Physician Order Entry (CPOE) in hospitals can significantly reduce the incidence of medication errors, a reduction of up to 88% in the number of serious medication errors according to one study in particular. The financial barriers to such a system can be significant, and a number of authors have commented that cultural factors—simply, the reluctance of some prescribers to enter prescriptions electronically rather than by hand—further restrict the adoption of such systems.

But there remain a number of things you can do to protect your patients short of computerized prescription entry. The first and most important is to be aware of the problem. Recognize that all of your hard work in evaluating and diagnosing your patient and developing a treatment plan can be undone by a carelessly written prescription. Once you make that realization, you can begin to understand the critical points at which errors can be introduced into the system. There are so many different drugs, many with similar sounding or looking names that, when written too quickly or with poor handwriting, can be confused. Specifically, you should consider the following:

- State law already limits you to a single order for controlled substances per prescription form and does not permit you to mix a prescription order for a controlled substance with any other drugs. For drugs

that are not controlled substances, put no more than three prescription orders on each prescription form (the Pharmacy Board showed us examples of as many as seventeen specific drugs listed on one sheet of a prescription pad);

- Print all prescriptions using a ballpoint pen, especially when using duplicate or triplicate forms;
- Use pre-printed prescription forms with your name and contact phone number clearly listed;
- Minimize the use of abbreviations and avoid those known to cause medication errors;
- Be available to clarify prescriptions with a pharmacy.

Above all, be cognizant of the fact the your prescription order is a communication between you and the dispensing pharmacist. For the sake of your patients, you should make the effort to ensure that the communication is clear and unambiguous. ♦

This article was developed in consultation with the Ohio State Board of Pharmacy

DO WE KNOW WHERE YOU ARE?

State law requires that . . .

- **you notify the Medical Board of a change of address within 30 days**
- **you provide both residence and principle practice addresses when you renew your license**