## MEDICATION ERRORS

## The Five Rights

## A Destination Without a Map

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As we have discussed in previous columns, errors in drug administration pose a great risk to patients. Most health care professionals, especially nurses, know the "five rights" of medication use: the right patient, the right drug, the right time, the right dose, and the right route—all of which are generally regarded as a standard for safe medication practices. Yet many errors, including lethal mistakes, have occurred even when health care professionals were confident that they had verified these "rights." Why does this happen?

First, although these criteria are the goals of safe medication practice, they offer little guidance to health care practitioners on the appropriate way to ensure drug safety. For instance, how does a pharmacist identify the right patient when the patient's name and room number on an order copy are blurred and the physician's signature is illegible? Whom should the pharmacist call for follow-up? How does a home-care nurse in an assisted-living facility identify the right patient if name bracelets are not used? Can the nurse depend on verbally questioning the patient? Unfortunately, relying on accurate information from patients has led to errors, for instance, when patients misunderstood a name or when they were confused.

Without adequate systems in place to help practitioners achieve the goals of the five rights, errors are likely.

The five rights, as stated, focus on the performance of individuals and do not reflect the fact that drug safety is a culmination of efforts of professionals from several disciplines; the responsibility for accurate drug administration lies with multiple individuals and reliable systems. Some of the factors contributing to a medical team's failure to accurately ver-

ify the five rights, despite their best efforts, include:

- poor lighting.
- inadequate staffing patterns.
- poorly designed medical devices.
- handwritten orders.
- trailing zeroes (e.g., 2.0 vs. 2) or using a decimal point without a leading zero (e.g., .2 instead of 0.2). Misinterpretation of such an order can result in a 10-fold dosing error.
- ambiguous drug labels.
- lack of an effective independent double-check system for high-alert drugs.

Nurses, for example, cannot verify the identity of the patient if they have no way of knowing whether patients are actually who they say they are or whether the name on a patient's armband is accurate. They can only verify two unique identifiers assigned to the patient upon admission to the facility—a process that the organization deems to be sufficient to confirm that the identity of the patient before they administer medications. Similarly, nurses and pharmacists cannot confirm that the right drug is being provided in a specific tablet or vial or that it contains the right dose and strength. However, they can be held accountable for the following steps:

- reading the label
- requesting an independent doublecheck if required
- questioning orders for drugs and doses that are illegible or that appear unsafe
- using bar-code technology if it is functional

Organizations consider these procedural rules to be sufficient to verify the right drug and the right dose. Thus, the duty of the health care practitioner is not so much to achieve the five rights but to follow the procedures designed by the organization to produce these outcomes. If the procedural rules cannot be followed because of problems within the



system, health care practitioners also have a duty to report the matter so that it can be fixed.

Although some might think that this distinction is minor, it is helpful to consider the following. If we hold individuals accountable for achieving the five rights, we should then give them the authority to design their own systems for achieving these outcomes. After all, how can we hold individuals accountable for situations and events that are not under their control? However, because organizations typically decide on the processes that are necessary for achieving the five rights, staff members who follow these procedures should not be held individually accountable for undesirable outcomes. Improvements must be made in the systems themselves, not in the individual's practice or behavior. The five rights are not a behavioral model for achieving medication safety; they are goals for which organizations must accept responsibility and design fail-safe ways so that the goals can be achieved.

Of course, the five rights are not the final word in medication safety. Unfortunately, managers often simply admonish health care practitioners who make an error for not following the five rights without recognizing or addressing the human factors and causes of the error originating within the system. Likewise, regulatory agencies often penalize health care professionals if they cannot verify the five rights; such actions perpetuate the belief that individuals should be blamed. The five rights should remain as medication-use goals, but we must help practitioners achieve these goals by establishing strong support systems that encourage safe practices.

The reports described in this column were received through the ISMP Medication Errors Reporting Program (MERP). Errors, close calls, or hazardous conditions may be reported on the ISMP Web site (www.ismp.org) or communicated directly to ISMP by calling 1-800-FAIL-SAFE or via e-mail at ismpinfo@ismp.org.