



The *five rights*: A destination without a map

It's been 2½ years since we've written in this newsletter about the shortcomings of relying only on the *five rights* for safe medication use (The *five rights* cannot stand alone. November 2004). When we first brought our views to readers, we stressed that the *five rights* are not the “be all that ends all” in medication safety. They are merely broadly stated goals, or desired outcomes of safe medication practices, that offer no procedural guidance on how to achieve these goals. Thus, simply holding healthcare practitioners accountable for giving the *right drug* to the *right patient* in the *right dose* by the *right route* at the *right time*, fails miserably as a method to ensure medication safety. Adding a sixth, seventh, or eighth *right* (e.g., *right reason*, *right drug formulation*, *right line attachment*) is not the answer, either.

“Failure to follow the *five rights*” is often cited as a performance deficit when an error occurs.

We also pointed out that the *five rights* fail to acknowledge that human factors and system weaknesses contribute to errors. Further, the focus of the *five rights* is limited to individual performance and does little to reflect that safe medication practices are a culmination of the interdisciplinary efforts of many individuals and reliable systems.

Despite these shortcomings, “failure to follow the *five rights*” is still often cited as a performance deficit when a medication error occurs, clearly perpetuating the mistaken belief that healthcare practitioners can be held individually accountable for achieving these goals. To be clear, nurses and other practitioners cannot be held accountable for achieving the *five rights*; they can only be held

accountable for following the procedures that their organizations have designed and held out as the best way to verify the *five rights*.

For example, nurses cannot really verify the *right patient* if they have no way of knowing whether the patient is who they say they are, whether the name on the arm band is accurate, and so on. They can only verify the two unique patient identifiers assigned to the patient upon admission—a process the organization deems to be “enough” to satisfy that this is the *right patient*—before administering medications. Likewise, nurses and pharmacists cannot really verify that the *right drug* has been provided in a given tablet or vial, or that it actually contains the *right dose/strength*. But they can be held accountable for reading the label, requesting an independent double-check if required, questioning orders for drugs/doses that are illegible or appear unsafe, using bar-code technology if functional, and so on. These are procedural steps the organization has deemed sufficient to verify the *right drug* and the *right dose*. Thus, the healthcare practitioners' duty to ensure safety is not so much to achieve the *five rights*, but to follow the procedural rules designed by the organization to produce these outcomes. If established procedural rules cannot be followed because of system issues, healthcare practitioners have a duty to report the problem so it can be remedied.

While some may think these distinctions are minor, consider the following: If we hold individuals account-

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New oral morphine strengths.

The company that makes **KADIAN** (morphine sulfate extended release) recently announced that FDA has approved 10 mg capsules. The product is also available in 100 mg capsules. The company also just announced that 200 mg capsules would also be available along with its other product strengths, including a 20 mg capsule. A word of caution is in order since confusion has been reported between drugs that have exactly a ten-fold difference in strengths. To avoid harmful mix-ups between the 10 mg and 100 mg strengths, and the 20 mg and 200 mg strengths, remind staff, including physicians, to avoid using a trailing zero when documenting doses, as 20.0 mg could easily be misread as 200 mg, and 10.0 mg could be mistaken for 100 mg.

What's good for the box is good for the bottle.

The boxes that hold **ALPHAGAN P** (brimonidine tartrate) ophthalmic solutions use color and font size effectively as a way to differentiate the two available



Once removed from the box, these eye medications look similar.

strengths, 0.1% and 0.15% (see photo). However, the enclosed dropper bottles themselves are not color differentiated, and the small font size used to show the concentration make them look identical. Once removed from their outer cartons, the containers are not likely to be placed back in their

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able for achieving the *five rights*, we really should give them the authority to design their own systems for achieving these outcomes. After all, how can we hold individuals accountable for things that may not be under their control? Since organizations typically decide the procedures that are necessary for achieving the *five rights*, individuals who follow these procedures should not be held individually accountable for an undesirable outcome. Improvements must be made in the systems designed to achieve the *five rights*, not necessarily in the individual's practice or behaviors carried out to achieve them. The *five rights* are not a behavioral model for achieving medication safety, but goals for which organizations must accept responsibility and design fail-safe ways that they can be achieved.

All is not as it seems...

Q looks like a **2**; **q** looks like **5**. A physician prescribed **RITALIN** (methylphenidate) 5 mg "now" and then every morning, but he used a cursive upper-case letter Q, which several nurses misread as the number 2 (see Figure 1). Adding to the confusion, the nurses thought the order could be interpreted several different ways:

- Give a 5 mg dose now and again at 2 a.m.
- Give a 5 mg dose now and then every day at 2 a.m.
- Give a 5 mg dose now and then two 5 mg tablets in the morning
- Give a 5 mg dose now and then two 5 mg tablets every morning.

Because of the different potential interpretations of the order, a nurse called the physician for clarification and the patient received the medication as intended. While "q" for "every" is not included in the ISMP List of Error-Prone Abbreviations (www.ismp.org/Tools/abbreviationslist.pdf), we have received other reports of errors in which a "q" was misread as a number. For example, the "q" in an order for **LEVOXYL** (levothyroxine) "1 tab po q day" was misread as the number 5 (see Figure 2), leading a pharmacist to dispense the drug with directions to take "1 tab 5 days each week." These errors offer insight into why most abbreviations are error-prone and should not be used.

Look for a follow-up article in our July issue on the "rights" nurses should be entitled to when administering medications, including the following six "rights" posted on the Massachusetts Nurses Association Web site (www.massnurses.org/nurse_practice/sixrights.htm):

- *The right to a complete and clearly written order*
- *The right to have the correct drug, route (form of the drug necessary for the route of administration), and dose dispensed*
- *The right to have access to information*
- *The right to have policies on medication administration*
- *The right to administer medications safely and to identify problems in the system*
- *The right to stop, think, and be vigilant when administering medications.*

Figure 1. An upper-case "Q" looks like the number "2"

Figure 2. A lower-case "q" looks like the number "5"

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Report medication errors to ISMP at 1-800-FAIL-SAF(E).

safetywires continued

respective boxes; and if they are, they might be placed into the wrong box, further risking an error. The drug is an alpha-2 adrenergic agonist, which is indicated for the lowering of intraocular pressure (IOP) in patients with open-angle glaucoma or ocular hypertension. We've asked the drug company to differentiate the actual bottles with color, as they have with the boxes, and to increase the font size used for the strength.

Special Announcements...

► **ISMP teleconference.** Please join ISMP for a two-part teleconference, **Smart Infusion Pumps: Strategies for Selection and Implementation**. In **Part I (June 6)**, ISMP's Matt Grissinger and ECRI Institute's Erin Sparnon will review errors associated with standard infusion pumps and the technology behind smart pumps, including key safety and human factors that should be considered when choosing a smart pump for your organization. In **Part II (June 21)**, John Mitchell, from the University of Michigan, and Mark Sullivan, from Vanderbilt University, will provide first-hand accounts of how they successfully implemented smart pumps and used the data generated from the technology to further reduce risks during infusion therapy. For more information, please visit: www.ismp.org/teleconferences/tc2.asp.

► **Free Webinar for Nurse Leaders.** On **May 16, 2007**, The Nursing Leadership Congress will offer a free Webinar on **Mentoring Others to Create a Culture of Safety**. ISMP, the American Organization of Nurse Executives, Joint Commission Resources, the National Patient Safety Foundation, and McKesson will be cosponsoring the program. This Webinar will focus on how to improve your organization's patient safety culture through mentoring. Patricia Crome, Senior Vice President at Virginia Mason Medical Center, and Mary Beth Navarra-Sirio, Patient Safety Officer at McKesson, will share best practices designed to make your staff more attuned to patient safety. To register, please visit: www.nursing-leadershipcongress.com/webinars.asp.