



Nurse Advise-ERR®

Educating the healthcare community about safe medication practices

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CMS 30-minute rule may result in unintended consequences

The Centers for Medicare & Medicaid Services (CMS) regulation [§482.23(c)(1)] that requires medications to be administered within 30 minutes before or after their scheduled times (herein called the **30-minute rule**) may be causing unintended consequences that adversely affect medication safety. While following the **30-minute rule** may be necessary for hospitals to comply with CMS requirements, many nurses find it difficult to administer medications to all their assigned patients within the 30-minute timeframe. This sometimes causes nurses to drift into the following unsafe work habits in order to meet the **30-minute rule** by:

- Removing medications from an automated dispensing cabinet (ADC) for multiple patients to avoid repeated trips to the cabinet that may delay drug administration
- Removing medications from an ADC before they are due for administration to be sure they are ready to administer at the correct time
- Documenting medication administration at the scheduled time but before actual administration is carried out (pre-charting), particularly if using an electronic medication administration record (eMAR) with bedside bar coding that flags, records, and/or reports overdue doses that are not administered within the **30-minute rule** time period
- Asking nurses from the previous

shift to prepare medications that must be administered shortly after coming on duty.

Despite the safety issues with pre-pouring or pre-charting medications, or removing medications for multiple patients at the same time, the need to comply with the **30-minute rule** often takes precedence—perhaps because “timely” medication administration is much more tangible to nurses than uncertain negative consequences, such as errors that may occur with the above-cited work-arounds.

Please take our survey on page 3 to voice your opinion about the 30-minute rule. Your opinion counts!

These errors may include possible mix-ups between patients’ medications, dose omissions, administering a drug that has been discontinued or a dose that has been changed since removal of the medication, and administering the wrong drug or dose caused by miscommunication between the nurse who may have prepared a medication and the nurse who administered it.

ISMP believes that the at-risk behaviors nurses must often engage in to comply with the **30-minute rule** place patients at greater risk than if they receive non-urgent medications outside the 30-minute window but still within a reasonable timeframe to ensure efficacy. Further, the **30-minute rule** is counterproductive to safety if the above-cited workarounds are required in order to comply.

ISMP has notified CMS staff of this issue and will report the conclusions from our discussion in a future issue of our newsletter. To

continued on page 2—**30-minute rule**

safetywires

⚡ Is it “units” or a 4? We recently became aware of a situation in the United Kingdom where a nurse at a long-term care facility misread an order for “8U” of insulin as 84 units. This resulted in the death of a critically ill diabetic patient with pneumonia. In most cases, errors involved with misinterpreting the abbreviation “U” have occurred when the “U” was misread as a zero, leading to 10-fold overdoses. We do not have a copy of the errant order in the above case, but a similar error happened in the US years ago in which 44 units of two different insulins were given instead of 4 units (Figure 1). The abbreviation U has also been misread as “cc,” which has resulted in infusion rate errors with IV insulin. Great progress has been made in eliminating “U” as an abbreviation for units, thanks to The Joint Commission’s “Do Not Use”

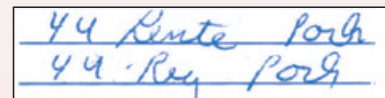


Figure 1. The dose was 4 units of each insulin, but the patient received 44 units of each, more than a ten-fold overdose.

list, but most of all, thanks to your persistence in ensuring that this dangerous abbreviation is never used.

⚡ Standard concentrations for neonatal drug infusions. The Vermont Oxford Network is an international non-profit voluntary collaboration concerned with medical care for newborn infants and their families. ISMP and Vermont Oxford have been working together to draft a list of commonly used neonatal IV medications/solutions to help establish standard concentrations and dosing units. One example on the list includes a recommendation for heparin 0.5 units/mL in 0.45% sodium chloride

continued on page 2 — *safetywires*

30-minute rule continued from page 1
best prepare for that discussion, we encourage all frontline nurses who administer scheduled medications to multiple patients (e.g., medical-surgical nurses) to complete a quick 5-minute Internet survey on this subject at: www.surveymonkey.com/s/30mr. We highly value your opinion and are very interested in your responses regarding positive or negative aspects of the CMS **30-minute rule**.

Meanwhile, we encourage you to carefully consider the risks inherent in the workarounds that may be taken to comply with the **30-minute rule**, and remember that exact timeliness with scheduled medications is oftentimes much less important from a clinical perspective than making sure the correct patient receives the correct medication. Take the time to be safe.

Old habits are hard to break

A message was sent through our consumer Web site, *ConsumerMedSafety.org*, which described a concern a woman had after observing nurses who were administering medications to a hospitalized friend:

Nurses would bring a clear plastic cup with loose tablets and capsules into the room, hand the pills to the patient, and ask the patient to swallow them. None of the pills were labeled. Is this the proper procedure, since it would be difficult to assure that these unlabeled medications were right for the patient?

Many years ago, medications were supplied in bulk doses, and nurses were taught to pour the doses from the bulk supplies into medication cups. But today, hospitals have adopted a much safer unit dose system in which most medications—even injectable drugs and oral liquids—are dispensed in a single-dose package, labeled with the name of the drug, dose, and other important information. Unit dose medications can be properly identified right up to the time they are brought to the patient. In addition,

unit doses have bar codes that can be scanned prior to administration. However, old habits are hard to break and some nurses still empty the packages into cups before bringing the medication to the patient.

To be safe, nurses should always keep each medication in its labeled, unit dose package until it is brought to the patient's bedside prior to administration. This process offers an opportunity for the nurse to conduct a final verification of the selected medications by comparing the product labels to the medication administration record. It is also important when utilizing bar-code scanning at the bedside. Keeping the medications in their packages also provides teachable moments during which patients can be educated about their medications and read the labels themselves, allowing them to become familiar with the names and doses of the medications they are receiving. Communicating this information to the patient can serve as another final check to assure the right medication and dose is being administered to the right patient.

safetywires cont'd from page 1

injection used to maintain patency of umbilical lines. We have posted the recommendations on our Web site (www.ismp.org/docs/neonatal-IVmist.pdf) and invite you to send comments on the draft to slevine@ismp.org by **August 31, 2010**. We will review these comments with members of the collaborative in September and finalize the recommendations at that time. ISMP also plans to expand this list to include pediatric and adult IV drug concentrations as well as recommendations for maximum doses for use with smart pump drug libraries.

► Special Announcements

CE credits. One hour of free CE credit covering the **January – June 2010 Nurse Advise-ERR** newsletter issues is now available at www.ismp.org/nursingce.

ISMP July webinar. Back by popular demand, on **July 22** we will present our annual **The Joint Commission (TJC) Medication Management Update (2010)**. Our speaker, Darryl Rich, PharmD, a surveyor for TJC, will discuss new and revised medication standards for hospitals and insightful tips to help you meet the intent of the standards. For details, visit: www.ismp.org/educational/webinars.asp.

ISMP Cheers Awards! Nominations for this year's ISMP **Cheers Awards** will be accepted through **August 27, 2010**. The prestigious **Cheers Awards** honor individuals, organizations, companies, and agencies that have set a superlative standard of excellence in the prevention of medication errors and other adverse drug events during the previous year. For more information visit: www.ismp.org/Cheers.

ISMP Employment. Our growing medication safety consulting operation is seeking an experienced pharmacist or nurse (preferred PharmD, MSN, MS or in progress) for a fulltime position based at our Horsham, PA (near Philadelphia) office. For more information, go to: www.ismp.org/jobline/jobDetails.asp?id=27&jt=1. Send your CV and statement of interest to sdicker@ismp.org, subject header: **Medication Safety Specialist**.

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



Free customized medication safety alerts for consumers and caregivers. Details at: www.consumermedsafety.org.

ISMP survey on the impact of the CMS 30-minute rule

Interpretive guidelines for CMS Conditions of Participation for Hospitals, Drug Preparation and Administration [§482.23(c)(1)] call for surveyors to observe that medications are given within 30 minutes of their scheduled times (called the **30-minute rule**). ISMP plans to communicate with CMS regarding its requirement. To prepare, we encourage frontline nurses who administer scheduled medications to patients (e.g., medical-surgical nurses) to complete this 5-minute survey. Your opinion is critically important and we are very interested in your responses. If you have Internet access, please visit www.surveymonkey.com/s/30mr to take the survey; if you do not have Internet access, complete the survey below and fax it to ISMP at 215-914-1492. Please submit your responses to ISMP by **August 31, 2010**.

1 Does your organization have a policy, procedure, and/or guideline that requires administration of scheduled medications within 30 minutes before or after their scheduled times? No (If no, we would still like your opinion regarding the remainder of the survey questions) Yes, for all scheduled medications Yes, for some scheduled medications Don't know

2 How often do you feel you are able to comply with the CMS **30-minute rule** when administering scheduled medications to your patients? Always Often Sometimes Infrequently Never Don't know

3 How often do you take these shortcuts in order to comply with the CMS **30-minute rule** (and corresponding hospital policy, procedure, and/or guideline)?

Shortcut	Always	Often	Sometimes	Infrequently	Never	Don't Know
Removing medications from an automated dispensing cabinet (ADC) or medication cart for multiple patients to avoid repeated trips to the cabinet/cart that may delay drug administration.						
Removing medications from an ADC or medication cart before they are due for administration to be sure they are ready to administer at the correct time.						
Documenting medication administration at the scheduled time but before actual administration is carried out (pre-charting).						
Asking nurses from the previous shift to prepare medications that must be administered shortly after coming on duty.						
Other (please describe; use additional paper/space as needed)						

4 Are you aware of situations where the CMS **30-minute rule** may have contributed to a medication error (either one that you made or that someone else made)? No Yes (please describe): _____

5 During the past 5 years, has your organization encountered state or Joint Commission surveyors who require strict compliance with the CMS **30-minute rule** while on site conducting a survey? No Yes Don't know

6 Do you believe the CMS **30-minute rule** should be retained? No Yes (**skip to question #8**)

7 If you answered **No** to #6, which of the following best describes the change you would like to see? (**select all that apply**)

60 minutes before or after the scheduled time for medications administered every 4 hours or less frequently

Timeframes specific to the type of drug (e.g., antibiotic, insulin, antihypertensive)

No timeframe should be dictated

Other (please specify): _____

8 Please check the features that are employed on the unit in which you work most often. (**select all that apply**)

ADCs for some or all scheduled medications Electronic medication administration records (eMARs)

Bedside bar-coding system to verify medications before administration

9 Please indicate your primary area of practice.

Inpatient medical or surgical unit OR/PACU/ED/outpatient surgical unit

Inpatient critical care/telemetry unit Long-term care facility

Inpatient specialty unit Other (please specify): _____

Send additional comments on this topic to: ashastay@ismp.org.

Thank you for participating! Please submit responses at www.surveymonkey.com/s/30mr or fax to 215-914-1492 by **August 31, 2010**.