Transcribing Medication Orders: Avoiding Errors

Marie is a health unit coordinator (HUC) on a busy medical unit. As she transcribes medication orders, she reads, “MgSO\textsubscript{4} 200 mg po bid” on the physician’s order sheet. The phone rings, and as she answers the caller’s question, she enters in the medication record, “MSO\textsubscript{4} 200 mg po bid.” Marie finishes the rest of that patient’s orders, and then goes back over them again to check for accuracy. She finds her error and corrects it. The physician ordered magnesium sulfate (MgSO\textsubscript{4}), but Marie transcribed the order as morphine sulfate (MSO\textsubscript{4}). If that amount of morphine had been administered to the patient, serious injury or death could have occurred. Marie realized that she was distracted when this error was made. Fortunately, Marie’s good transcription practice of rechecking her orders allowed her to catch and correct this error.

Errors are a serious problem in healthcare today. A recent report by the Institute of Medicine revealed that between 44,000 and 98,000 Americans die annually in hospitals as a result of medically-related errors. A significant number of these errors involve medications... prescribing, transcribing, dispensing, and/or administering them. As a HUC, your part in this process often involves transcribing medication orders and communicating with the pharmacy. This requires knowledge of medical terms and commonly-prescribed drugs. It also requires your full attention and utmost accuracy.

Errors are usually the result of systems problems. When appropriate safeguards are not in place, such as when there are too few people involved in the process from prescribing to administration, the chance of medication error increases. For example, a single person, such as a nurse, may read the new order, obtain the drug, and administer it. In that case, the likelihood of error is greater than if a HUC transcribed the order and sent it to the pharmacy, where it was filled and sent to the unit. With several people reviewing the order, there is a greater chance for errors to be detected.

Controlling the Risk of Error

While preventing all human error is not realistic, there are many strategies that can help to decrease this likelihood: Take a systematic approach to order transcription—In other words, use the same process each time. By performing transcription in an orderly way each time, good habits are developed, and there is less likelihood of missing a step or making an error.
For example, always start by reviewing the patient’s orders and ensuring that appropriate patient identification is on the order sheet. Then, send the orders to the pharmacy by copy or computer. Immediately attend to any STAT orders. Proceed with the rest of the order transcription process, according to your facility’s policy. Always finish the process with a final check of all orders for accuracy before signing your name, title, date and time. The actual process in a given facility varies, since some facilities use computer-generated orders and medication administration records (MAR), while others use handwritten forms.

Communicate appropriately—Communication is a vital part of your job. It is essential that you provide other members of the healthcare team with information needed to deliver safe and effective patient care. Send orders to the pharmacy as soon as you get them. Statistics show that errors are reduced when medication orders are screened in the pharmacy before being administered on the unit. The pharmacist’s expertise, plus computerized screening for appropriate drug use and patient allergies, provides this additional margin of safety. When a STAT or NOW medication is ordered, alert the nurse immediately so that it can be administered. If you have questions about any order, or something does not seem quite right, do not hesitate to ask the nurse or prescriber (physician, nurse practitioner or physician’s assistant) for clarification. For example, if an order is written for a drug that is listed on the patient’s allergy sticker, let the prescriber or nurse know right away.

Manage interruptions—Interruptions, by the phone, visitors, staff, physicians and others, are a constant fact of life for the HUC. Acknowledge that interruptions are going to occur, and then find ways to handle them. If you are interrupted while transcribing orders, make a note (mental or written) of where you are in the process, and stop there. Resume when you can give your full attention to the orders.

Write clearly—All printing or writing, including your name, transcription symbols and entries into the MAR, should be clear and easy to read. If you need to make a correction, follow your facility’s policy... usually making a single line through the entry, writing “error”, and your name and date. Mark each order clearly with a transcription symbol to prevent overlooking an ordered medication. Be careful to keep your transcription symbols from touching any part of the written medication order, since that may change the appearance, and interpretation, of the order.

Transcribe precisely—Ensure that the order is complete, and write or enter it exactly as it is written. A complete medication order contains drug name, amount, route and frequency... Lasix 20 mg po bid. The order may also specify conditions appropriate to that drug, such as “prn for relief of pain.” Ideally, (but not always!) the order may also specify the purpose of the drug, as a further safeguard against error...Procardia XL 30 mg daily for hypertension. If the order is not complete with the basic information required, let the nurse or prescriber know. Make sure that you can read each part of the order, especially if letters and numbers run together. An order for Captopril25mg po bid may look like Captopril 125 mg, rather than the intended 25 mg.

Read the order carefully to make sure that a line on the paper does not hide a decimal point or part of a number. If the pharmacy copy of the order form does not have lines, read it for comparison before sending it to the pharmacy. Any decimal points or hidden writing should be clear on that copy. To alert others to the presence of a decimal, prescribers should add zeros before a number that is less than one, such as 0.25 mg. However, trailing zeros should never be used after whole numbers... 12 mg should be written as 12 mg, not 12.0 mg.

Watch for drug names that look alike—If you have worked on the same unit for a while, you are probably familiar with the drugs commonly ordered for the patients on that unit. This can have advantages, as well as disadvantages. The advantage is that you have a good knowledge of the medications and abbreviations used, and can transcribe those orders quickly and accurately. The disadvantage is that you may become so used to seeing certain drugs that you mistake an unfamiliar drug for one you work with often. For example, it is very easy to confuse Nubain with Nebcin, or Lodine with Iodine, especially if poor handwriting is a factor. The US Pharmacopeia maintains a list of commonly-confused drugs at its website, www.usp.org.

Watch for confusing abbreviations—Does that D/C in front of the medication order mean that the drug is discontinued, or that the patient is to be discharged with it? Does SC in an order mean subcutaneous, or is it really SL, meaning sublingual? When in doubt, ask! For a list of confusing abbreviations, visit The Institute of Safe Medication Practices at www.ismp.org.

If you make an error—Let your supervisor know as soon as the error is discovered. Determine how it happened, and what actions may have prevented it. Use the experience to learn and increase your skills, and remember that all humans make mistakes.

As a HUC, you are a valued and trusted member of the healthcare team. You have the knowledge and ability to help keep patients on your unit safe from medication errors.
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Learning Objectives:
After reading the newsletter, the health unit coordinator should be able to:
1. Discuss the impact and underlying cause of errors in today’s healthcare system.
2. List four practices that can help to reduce the risk of error in transcribing medication orders.
3. Identify the role of drug names and abbreviations in promoting medication errors.

Suggested Adjunct Activities:
1. Collect several examples of real or hypothetical medication transcription errors. Have the health unit coordinators discuss these errors to identify contributing factors and ways they can be prevented.

Competency Assessment Tool Answer Key:
1. B. systems problems
2. B. False
3. A. transcribing orders using the same process every time
4. C. reviewing each order for accuracy
5. C. notify the nurse of the order
6. D. marking a transcription symbol by each order as it is transcribed
7. A. True
8. C. route
9. B. decimal point
10. D. have the prescriber clarify the order
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Directions: Place the letter of the one best answer in the space provided.

1. Most commonly, medication errors are the result of:
   A. inexperienced staff
   B. systems problems
   C. poor handwriting
   D. lack of staff education

2. The best way to prevent medication errors is to have as few people as possible involved in the process.
   A. True
   B. False

3. Health unit coordinators can decrease the chance of medication errors by:
   A. transcribing orders using the same process every time
   B. varying the steps in the transcription process to prevent boredom
   C. working on each set of orders from the easiest to most difficult tasks
   D. transcribing orders for several patients at one time

4. When transcribing medication orders, the final step before signing off should be to:
   A. send a copy of the orders to the pharmacy
   B. mark off each order using transcription symbols
   C. review each order for accuracy
   D. enter the order in the Medication Administration Record (MAR)
5. Kelly, the HUC, reads a set of new orders and sees the following: “Valium 5 mg IV push now.” After sending the orders to the pharmacy, Kelly’s next action should be to:
   A. transcribe the set of orders
   B. ask the prescriber for clarification of the order
   C. notify the nurse of the order
   D. check other charts for new orders

6. Which of the following actions helps to ensure that all medication orders are transcribed, and not overlooked?
   A. keeping transcription symbols from touching the written order
   B. making sure all entries in the MAR are clearly written
   C. asking the prescriber to clarify an unfamiliar order
   D. marking a transcription symbol by each order as it is transcribed

7. Reading the bottom, unlined copy of the order sheet may help the HUC to detect hidden decimal points or parts of numbers.
   A. True
   B. False

8. The following order is written in a patient’s chart: “Nubain 10 mg q6h prn pain.” Which of the following is not specified, making this an incomplete order?
   A. drug name
   B. amount
   C. route
   D. frequency

9. When transcribing medication orders, the presence of a zero in front of the specified drug amount should alert the HUC to a(n):
   A. large amount of medication being ordered
   B. decimal point
   C. incomplete order
   D. pediatric order

10. When transcribing a medication order, the HUC sees an abbreviation that could be either bid or tid. The appropriate action is to:
    A. look in the drug reference book to see which schedule is more common
    B. transcribe the order as bid, since that’s what it looks most like
    C. ask another HUC to interpret the order
    D. have the prescriber clarify the order