

One of the most important ways to prevent medication errors is to learn about problems that have occurred in other organizations and to use that information to prevent similar problems at your practice site. To promote such a process, the following selected agenda items have been prepared for you and your staff to stimulate discussion and collaborative action to reduce the risk of medication errors. These agenda topics appeared in the *ISMP Medication Safety Alert!* Community/Ambulatory Care Edition between January 2007 and June 2007. Each item includes a brief description of the medication safety problem, recommendations to reduce the risk of errors, and the issue number to locate additional information as desired.

Issue No.	Problem	Recommendations	Organization Assessment	Action Required/Assignment	Date Complete
6	<p>Instances of significant patient harm, including death, continue to be reported when fentanyl transdermal patches are prescribed inappropriately to opiate-naïve patients and for acute post-operative pain. A 71-year-old man, who had only recently started opiate therapy, was hospitalized after his physician gave him a fentanyl 100 mcg/hr patch. In another case, a patient died 12 hours after being discharged following same-day surgery. According to the reporter, at discharge a nurse applied a fentanyl 75 mcg/hr patch to the patient's skin and gave him a prescription for oxycodone. Despite changes to package labeling and efforts by the FDA, ISMP, and manufacturers to enhance provider education about safe prescribing, the incidence of harm-causing events remains unacceptably high.</p>	<p>Limit use of the patch to opiate-tolerant individuals with chronic pain. Prescribers must understand available drug information before initiating therapy. Pharmacists and nurses should verify that patients receiving fentanyl patches are opiate-tolerant individuals with chronic pain. Patients and/or caregivers should receive complete education about the safe use of the patch. This education should be mandatory and scripted for practitioners to promote consistent discussions. All patients with new prescriptions for fentanyl patches greater than 25 mcg/hour should be asked if they are currently using the patch. If they are first-time users and/or have not been receiving high-dose opiate therapy for a sustained period of time, the pharmacist should contact the prescriber.</p>			
Requirement #1 - Stick to patient!					
6	<p>ISMP is aware of product quality concerns that may lead to errors with the use of DAYTRANA (methylphenidate transdermal system) patches. Too often, the patches are not remaining affixed to the patient's skin. Parents/caregivers are employing a variety of unapproved and potentially unsafe strategies to keep these patches affixed to their children.</p>	<p>The manufacturer is developing a "thicker" liner that will allow for easier removal from the patch's adhesive. Educate parents, caregivers, and patients regarding the safe storage, handling, application, and disposal of Daytrana patches. Advise parents to use the company's toll-free line 1-800-828-2088 to report problems with the patch.</p>			
Keep an eye on textbook errata					
1	<p>Practitioners rely on reference books to guide their practice. Incorrect and/or outdated information from references can lead to serious errors in medication prescribing, preparation, and administration.</p>	<p>ISMP receives reports of textbook and drug reference errata from practitioners and publishers. Reports can be viewed at: www.ismp.org/Errata/default.asp. Verify that the references used in your facility are current and check the publisher's website regularly for updates or corrections.</p>			

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Not the proper mix					
2	Prescriptions for oral antibiotics requiring reconstitution may be bagged and stored in the "will call" area but not reconstituted until the patient arrives at the pharmacy to pick up the prescription. We received a report in which a clerk gave an unmixed antibiotic to the patient's father who then accidentally administered 9 mL of powder to his son.	Consider placing prescriptions for oral liquid medications that need to be reconstituted in a separate area from other prescriptions to be picked up. Mark this area and each prescription as "not to be dispensed without speaking to the pharmacist" to help remind staff that the product needs to be mixed and that a pharmacist should review directions with the patient or caregiver prior to leaving the pharmacy.			
Safe practices not evident when dispensing samples					
3	A study that evaluated seven specific ISMP recommendations regarding safe dispensing of drug samples found that none of the 17 primary care practices participating in the study complied with all recommendations. While verbal instructions were routinely provided, labeling and written patient instructions were inadequate.	The following information should be included on the label of sample medications: patient name, reason for the medication, amount that should be taken, frequency of taking the medication, special precautions, and any significant side effects. Additional strategies can be found at: www.ismp.org/Newsletters/acutecare/articles/19990714.asp .			
ZYRTEC (cetirizine) and ZYPREXA (olanzapine) mix-ups					
1	Mix-ups have occurred between these drugs, most often when prescriptions and container labels have been misread. Both drugs are available in 5 mg and 10 mg tablet strengths, which increases the probability of confusion. Patients who have received Zyprexa in error have experienced dizziness, and patients on Zyprexa for a behavioral health illness have relapsed when given Zyrtec in error.	Notify practitioners about the risk of mix-ups when either of these drugs are prescribed. Include the purpose of the drug on prescriptions; store containers of these products apart from one another; add reminders on containers and computer screens about the potential for error.			
Levothyroxine and lamotrigine (LAMICTAL) mix-ups					
3	A physician ordered 3 different medications, one of which was lamotrigine 100 mg, on a single prescription blank. Subsequently, a pharmacist misread the handwritten order as levothyroxine 100 mcg. The drugs share dosage strength numbers (25, 100, 150, and 200) and are administered orally once daily, increasing the risk of mix-ups.	Warn practitioners about the potential for mix-ups with these products. Prescribers should include the indication for use on prescriptions for these drugs and write for only one medication on each prescription blank. Pharmacists should counsel patients with new prescriptions to help avoid mix-ups.			

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Caution with new strength of KADIAN (morphine sulfate extended release)					
3	<p>FDA has approved KADIAN 200 mg capsules. The product is also available in 20 mg capsules. A word of caution is in order since confusion has been reported between drugs that have a ten-fold difference in strength.</p>	<p>Precautions should be taken before making the higher strength of Kadian available for use. Prescribers should avoid using a terminal (e.g., trailing) zero when ordering the 20 mg strength of morphine since 20.0 mg could be misread as 200 mg.</p>			
“PNV,” another unsafe abbreviation					
4	<p>A pregnant patient had been given a prescription for “PNV” tablets (“prenatal vitamins”). The pharmacist who received the prescription interpreted PNV to stand for “penicillin VK” and dispensed penicillin tablets in error.</p>	<p>Abbreviating drug names is an unsafe practice that should be avoided. Prescribers should never use them, and pharmacists should always check with prescribers if there is any question as to the intended meaning of the abbreviation.</p>			
Medication PEN injectors: not without impending risks					
1	<p>ISMP has received reports of medication errors that have occurred when using pen injectors. Problems reported with the devices include error-prone device design, dispensing errors due to look-alike names, and mistaking multi-dose devices as single dose. For specific information on risks associated with pen devices, see the full length article in the January 2007 issue.</p>	<p>Patient education with face-to-face counseling and actual use of the device, including a return demonstration from the patient, are crucial when prescribing or dispensing pen injectors. Some injectors come with a “demo” device that allows the patient to practice the correct technique. Pharmacists should make sure they have “demo” devices to use for patient training.</p>			
ALKA-SELTZER PLUS DAY AND NIGHT					
2	<p>The presentation of drug and dosing information on the label of these products is confusing. Separate <i>Drug Facts</i> labels for the daytime and night-time formulations are printed side-by-side on the box. These labels are differentiated only by colored text and borders and easily overlooked abbreviated names in the headers (i.e., “ASP® Non-Drowsy Cold” and “ASP® Night Cold”). A patient could confuse one formulation for the other. The dosing instructions are “hidden” behind the lift-up or peel-back panels.</p>	<p>Consider posting alerts on shelves near Alka-Seltzer products that recommend patients ask the pharmacist for assistance when selecting these products. Inform patients that many other commonly used over-the-counter products may not contain the same active ingredient(s) they have in the past.</p>			

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Too much is not a good thing					
6	A 17-year-old female track star died following the use of multiple over-the-counter (OTC) muscle pain relief products that contained methyl salicylate (e.g., Bengay, Icy Hot).	Use this event as a “wake-up” call to educate patients about OTC products. Pharmacists should be easily accessible to speak with patients. Teach patients about the dangers of topical methyl salicylate overdose, stressing that it is available in many OTC products. Utilize “shelf talkers” near these and other selected OTC products to raise awareness.			
Substitutions can be risky business					
4	A patient’s prescription for lactulose, an osmotic laxative, was out of refills. Rather than wait for a new prescription, the pharmacist suggested KARO corn syrup, an “age-old remedy” sometimes used for constipation. However, the patient had been prescribed lactulose to treat hepatic encephalopathy by removing ammonia from the body.	Always verify the indication of the original prescription before making substitution recommendations. Encourage prescribers to include the purpose on prescriptions. Always check with the prescriber before recommending a different medication. The indication should be entered into the patient’s medication profile.			
Engage patients as a last line of defense for safety					
5	A mother picked up a refill for her child for STRATTERA (atomoxetine). The mother and her son recognized that the capsules were a different color than the previous prescription they received. The mother called the pharmacy. The pharmacist checked the color of Strattera and realized that CYMBALTA (duloxetine) 60 mg, an antidepressant, had been dispensed.	Encourage patients to check their prescriptions and to ask questions if they do not find what they expect. Before the patient or caregiver leaves the pharmacy, open the container and visualize the contents together, even with refill prescriptions. This is an extremely important step, especially for high-alert medications and all prescriptions dispensed for pediatric patients.			
Sorting the strengths out					
5	A prescription for SINEQUAN (doxepin) 10 mg was mistakenly entered into the computer and dispensed as Sinequan 100 mg. Upon entering “Sinequan” in the pharmacy software system, the list of results placed Sinequan 100 mg on the first line followed by Sinequan 10 mg. It’s believed that the sequential listing of both strengths, with a ten-fold difference, contributed to the selection of the wrong strength, as did the listing of the higher strength first.	Check the logic used by your computer system to sort drug information. Until this is resolved by software vendors, consider adding an asterisk to the doxepin 100 mg strength name (doxepin *100 mg) to cause it to fall to the bottom of the alphabetical sort. However, this may not be a safe option if electronic calculations of doses and dose limits originate with information in the field that contains the asterisk.			