

ISMP Ambulatory Care Action Agenda



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 2008 and June 2008. 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	Recommendation	Organization Assessment	Action Required/Assignment	Date Complete
Purinethol or propylthiouracil?					
5,6	A fatal error occurred when a pregnant woman was given a prescription for propylthiouracil, abbreviated as "PTU," early in her pregnancy but received Purinethol when the prescription was filled. A second patient experienced liver toxicity when a prescription for propylthiouracil, also written as "PTU," was dispensed as Purinethol.	Computer order entry system warnings should be installed for both drugs, with hard stops that require documentation. Do not store Purinethol and propylthiouracil near each other, and consider use of warning labels on product containers. Pharmacists should ask patients about the indication for the medication. To facilitate this, prescribers should list brand and generic names on orders for Purinethol, and the purpose when prescribing either drug. The abbreviation "PTU" should never be used.			
New look-alike name pair: Nexium and Nexavar					
4	NEXIUM (esomeprazole), a proton pump inhibitor, has been confused with NEXAVAR (sorafenib), a chemotherapeutic agent identified as a high-alert drug. Confirmation bias led the pharmacist to misinterpret the less familiar product, Nexavar, as the more familiar Nexium.	Prevent this mix-up in your organization by using tall man lettering in computer systems and requiring prescribers to include the purpose of the drug on the order or prescription. Electronic prescribing, which eliminates the need for transcription, is another strategy to prevent look-alike drug name mix-ups, because even clearly written orders can be misread.			
TB or not TB? Scale down dosing errors with methotrexate					
3	Some providers recommend using insulin syringes when patients self-administer methotrexate injection. Patients may misunderstand and miscommunicate dosing instructions, especially if they express doses in units instead of mg. Dosing confusion becomes commonplace anytime insulin syringes are used to administer any non-insulin product.	Use of a tuberculin syringe with a volume scale would prevent such dose miscommunications. Consider making counseling by a pharmacist mandatory for methotrexate. Teach patients how much medication to take using the unit of measure associated with the drug, not a volume or "unit equivalent" associated with a particular syringe. Incorporate return demonstrations in patient education. Clinicians must be sure to elicit and express dosing information accurately, being aware that patients may express doses in atypical units of measure.			

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Caution regarding color-coded eye meds					
6	The American Academy of Ophthalmology has long endorsed a voluntary color-code scheme for ophthalmic products based on therapeutic class. But the color schemes are too similar to differentiate between classes of eye medications, and numerous product mix-ups, both between and within each class, have been reported.	Color-coding ophthalmic products according to therapeutic class does not decrease medication mix-ups in pharmacies. To prevent look-alike problems, pharmacy purchasers should avoid awarding contracts to, or purchasing from, one vendor for an entire product line and should consider purchasing drugs within a class from different manufacturers.			
Daytrana—not a “special Band-Aid”					
2	A kindergarten student wearing a DAYTRANA (methylphenidate transdermal system) patch shared it with a peer who wore it for several hours. Daytrana’s consumer medication guide does not explicitly advise parents to counsel children about not sharing the patch with others.	Transdermal systems for children require specific handling and patient education to ensure safe use. Do not refer to transdermal patches as “band-aids” or “stickers.” Educate parents to inform teachers and other caregivers of medications their children use. Remind children that they should never share medications with others.			
Anonymous patches					
1	CATAPRES (clonidine) patches present problems because the manufacturer does not print the name or strength of the drug on the patch. Problems can occur if the dose of a drug delivered via patch is changed, or multiple patches are required.	There is a code on each patch that can be used to identify the strength: BI 33 is a 0.3 mg patch, BI 32 is 0.2 mg, and BI 31 is a 0.1 mg patch. Share these codes and educate patients about this issue. Teach patients to keep an accurate, up-to-date list of their medications, including the date a patch was applied.			
Not the Proper Mix					
2	An 8-month-old girl was prescribed amoxicillin/clavulanate potassium (AUGMENTIN) suspension. The pharmacy failed to mix the powder prior to dispensing the medication. After ingesting the unmixed antibiotic powder, the girl had to be rushed to the emergency department to be treated for an antibiotic overdose.	Consider placing prescriptions for oral liquid medications that need to be reconstituted away from other prescriptions. Mark the area as “not to be dispensed without speaking to the pharmacist.” Open the bottle with the patient and/or caregiver. Have the caregiver or patients demonstrate how to measure and administer the dose.			
“4 QD”, a sure thing for a daily overdose					
1	A psychiatrist prescribed lithium carbonate as “LiCO3 300 mg 4 QD.” Pharmacy personnel interpreted it as take 4 capsules once daily. But, one pharmacist questioned the daily dosing of the immediate-release product. The prescriber’s office verified the frequency was “4 QD,” which they used for “take 1 capsule four times a day.”	This is a dangerously written prescription. Healthcare practitioners should stop using the abbreviation “QD” in all forms of communication. In this case, not only was “QD” used but it was used incorrectly. Instead, use the word “daily” in place of “QD.” When expressing the directions “four times a day,” it is best to use complete English words.			

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Which metoprolol formulation do you want, doctor?					
3	Confusion is occurring between immediate-release metoprolol tartrate (LOPRESSOR) and extended-release metoprolol succinate (TOPROL-XL). Since the introduction of generic formulations of Toprol-XL, pharmacies are receiving prescriptions that identify the drug to be dispensed only as “metoprolol.” Prescribers are not indicating which dosage form they want patients to receive.	Educate your colleagues about the possibility of confusing these products. Prescribers should explicitly state which dosage form they want dispensed. Pharmacists should communicate with patients and/or verify with the prescriber which metoprolol product is to be dispensed if it is not specified on the prescription. Be sure patients understand that various dosage forms of metoprolol exist and help them understand which one has been prescribed for them.			
Child dies from misuse of fentanyl patch					
6	A 6-year-old girl died after her foster mother gave her an appropriate dose of ibuprofen and placed a leftover fentanyl patch on her neck for neck pain. The child’s foster mother had been given a prescription for fentanyl patches several years earlier to treat chronic pain after an accident. The patch she placed on the child was leftover from that prescription.	Provide complete patient education regarding safe and proper use and disposal of fentanyl patches when prescribing and dispensing fentanyl patches. Always remind patients to discard unused portions of their prescriptions. This education should be mandatory and scripted for practitioners to promote consistent discussions.			
Keeping patients safe from iatrogenic methadone overdoses					
2	Patients being treated with methadone for narcotic addiction or chronic pain have received inadvertent, sometimes fatal, overdoses. In vivo, methadone behaves differently than other opiates, and these differences must be appreciated by healthcare professionals who prescribe, dispense, or administer methadone, and by the patients who receive the drug.	Do not prescribe the drug unless you are familiar with it. If prescribing methadone for pain, consider designating all patients as opioid-naïve for the purposes of introducing methadone, no matter how much opioid medication they’ve previously been taking. Patient screening should occur when use of this drug is contemplated. Use commercially-available methadone solution(s) to prevent compounding errors. For more safe practice recommendations, please refer to the full article.			
FDA issues warnings about Spiriva and Foradil					
3	FDA and the American Association of Poison Control Center’s have received many reports of patients swallowing SPIRIVA (tiotropium bromide) and FORADIL (formoterol fumarate) capsules rather than placing them in the inhalation devices. Neither product will treat a patient’s breathing condition if the contents of the capsules are swallowed.	Share the Public Health Advisory (www.fda.gov/cder/drug/advisory/tiopropium_formoterol.htm) with your colleagues. Patients and staff must be educated regarding the proper administration of these medications before they are dispensed or administered. Training kits containing an inhaler device, placebo capsules, and patient education materials are available from each manufacturer.			

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