ISMP Medication Safety Alert! ActionAgenda

ISMP 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 between May 2018 and August 2018. Each item includes a brief description of the medication safety problem, recommendations to reduce the risk of errors, and the issue to locate additional information. The Action Agenda is also available for download in a Word format at: www.ismp.org/node/1175.

Key: ⚠ — ISMP high-alert medication

Issue	Problem	Recommendation	Organization Assessment	Action Required/Assignment	Date Completed
Prevent accidental daily methotrexate dosing					
08/18 ⚠	ISMP has designated oral methotrexate for nononcologic use as a high-alert medication since 2003. Although the risk of errors with oral methotrexate for nononcologic use has been known for a long time, harmful and fatal errors are still occurring. Ongoing errors suggest that more needs to be done to reduce the risk of patient harm.	Default to a weekly dosing schedule and require verification and entry of an oncologic indication for daily orders in order entry systems. Limit the prescription quantity to a 30-day supply and verify the dose and frequency on all medication lists and patient instructions. Educate patients and provide them with verbal and written instructions that specify the weekly dosing schedule. Provide clear instructions on pharmacy labels for weekly dosing and specify the day of the week (written in full, not abbreviated) the medication should be taken. More strategies are available in full newsletter article.			
Reduce the risk of medication errors at school					
08/18	Just like any other location where medications are administered, errors can and do happen at schools. Children may receive their medication at school from staff who have no medical training. Prescribers and pharmacists can take steps to help parents, school staff, and school nurses safely navigate the use of medications at school.	Prescribers: Provide complete instructions that parents, school staff, and nurses can use for prescription and over-the-counter medications. The instructions should include, for example, name of the child; date of the order; name, purpose, and dose of the medication; instructions on how often to administer the medication; by which route it should be administered; and any special instructions or precautions. Pharmacists: Ensure the pharmacy label's instructions include guidance on the time of administration and how long the medication should be given. Offer, as appropriate, to divide the child's medication into two bottles, each with its own label, so one can be kept at home and the other at school.			

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Analysis of vaccine errors reported in 2017 shows errors continue with little change					
06/18	The vaccines involved most often in errors have not changed since 2012: HepA, DTaP-IPV, influenza virus, Tdap, HepB, MMRV, 9vHPV, DTaP, and DTaP-IPV/Hib. These errors have many of the same contributing factors previously identified, including: age-dependent formulations of the same vaccine; unfamiliarity with the indicated ages, dosing, and schedules; similar brand and generic names, abbreviations, and labeling; and failing to verify the patient's age or check the patient's record or vaccine registry prior to vaccination.	Examine protocols and how vaccine names are presented on computer screens and medication administration records. Set up the treatment area to reduce the risk of wrong patient errors. Take precautions during vaccine dispensing and verify the patient's immunization status. Be sure to provide education to the patient and staff. A table of staff educational topics associated with frequently reported vaccine errors can be found in the June 2018 issue of the ISMP Medication *Safety Alert!* Community/Ambulatory Care.			
Error reports with SHINGRIX and ZOSTAVAX herpes zoster vaccines					
06/18	Different storage requirements of components/diluents and routes of administration for Shingrix and Zostavax have led to errors. Shingrix lyophilized antigen and adjuvant suspension must both be refrigerated. The Zostavax lyophilized vaccine component must be frozen, and its sterile water diluent must be refrigerated or kept at room temperature. Shingrix is administered intramuscularly (IM) while Zostavax is given subcutaneously.	Educate staff about the differences between Shingrix and Zostavax. Label the storage bins/shelves using the updated Centers for Disease Control and Prevention (CDC) vaccine labels, which draw attention to the differences in storage, component/diluent, and routes of administration (www.ismp.org/sc?id=3101). Store the Shingrix lyophilized component and adjuvant suspension together to reduce the risk of using the wrong diluent.			
Implement a post-fill audit program					
08/18	While we try to prevent and intercept errors when entering and preparing prescriptions, some errors make it all the way through the dispensing process. For example, during order entry of a prescription for amitriptyline 10 mg, the pharmacist selected amitriptyline 100 mg by mistake. The wrong strength of medication was dispensed to the patient. However, the error was intercepted later when a second pharmacist was reviewing prescriptions that had been processed over the previous 24 hours.	Organizations need layers of strategies in place to intercept the error before it reaches the patient or causes harm. One strategy to implement is a post-fill audit program to compare the actual prescription received from the prescriber to the computer-generated label within 24 hours of dispensing the medication. If you already have a post-fill audit program in place, consider expanding this program to include random checks of the will call bins to compare the label to the actual product/contents dispensed.			

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Managing the drug shortage crisis					
07/18	Many practitioners feel frustrated with the current state of drug shortages. Drug shortages are causing the use of less desirable, more expensive, or unfamiliar alternative drugs; errors and poor patient outcomes due to absent or delayed treatment; and preventable adverse drug events due to use of alternative drugs or dosage forms. Additionally, lack of advance notice reduces ability to properly prepare for an impending shortage.	Assess, communicate, and monitor each drug shortage situation. Other strategies include: identify drug shortages early; assess inventory on hand; determine an organizational position on alternative suppliers; collaborate with other local healthcare providers; determine therapeutic alternatives; conduct a proactive failure mode and effects analysis (FMEA) for therapeutic alternatives; prioritize and limit drugs based on patient categories; closely monitor adverse events; and do not hoard the drug or its alternatives.			
Safeguards needed when linking or copying old prescriptions to new prescriptions					
07/18	When copying a prescription for **ADDERRALL XR** (dextroamphetamine sulfate, dextroamphetamine saccharate, amphetamine sulfate and amphetamine aspartate), the pharmacist did not notice that the dose was changed from 20 mg to 10 mg. The prescription was filled with 20 mg capsules and dispensed to the patient. One factor contributing to this error was the computer system's functionality that allows the person conducting order entry to copy or link to a previous prescription for the same drug.	Evaluate if the efficiency gains of this functionality outweigh the safety risks. If used, review the workflow and prompts when copying or linking to old prescriptions. Design computer systems to guide the person to verify that each piece of information on the new prescription matches the one already on the patient's profile. Conduct a double check of the order entry by comparing the prescription information entered into the computer system to that contained on the original prescription. If the original prescription is placed on hold, this same verification should occur again when the prescription is eventually dispensed.			
Educate fluorouracil home infusion patients about accidental overinfusion					
07/18 ⚠	A physician prescribed a 7-day continuous infusion of fluorouracil for a patient at home via an elastomeric infusion pump. The patient received the entire infusion in just 4 days but waited until his scheduled doctor's appointment 4 days later to report the mishap. The patient experienced serious sequelae and was admitted to the hospital for 7 days.	Educate patients with ambulatory infusion pumps about how the pump works, what to expect during treatment, the infusion rate, how long the infusion should last, how much should be left in the container each day, and to immediately report any incident to their care team should the container empty sooner than anticipated so an antidote can be administered.			