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ISMP
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Community/Ambulatory Care
ISMP Medication Safety Alert!®
Educating the Healthcare Community About Safe Medication Practices

Targeted Medication Safety Best Practices for Community Pharmacy: Three new Best Practices

ISMP has released its 2025-2026 ***Targeted Medication Safety Best Practices for Community Pharmacy***, whose purpose is to identify, inspire, and mobilize widespread, national adoption of consensus-based *Best Practices* to address recurring problems that continue to cause fatal and harmful errors despite repeated warnings in ISMP publications. The *Best Practices*, which are reviewed by an external expert advisory panel, represent high-leverage error-reduction strategies, many of which have already been successfully adopted.

While the *Best Practices* might be challenging for some organizations to achieve, they are all practical and realistic, and their value in reducing medication errors is grounded in scientific research and/or expert analysis of medication errors and their causes. Implementation of the *Best Practices* can vastly improve medication safety and reduce the risk of significant patient harm. While these *Best Practices* were created for community pharmacy, some may be applicable to other healthcare settings such as medical offices and clinics. ISMP also offers *Best Practices* for hospitals.

New Best Practices for 2025-2026

Initially introduced in 2023 with five *Best Practices*, the ***Targeted Medication Safety Best Practices for Community Pharmacy*** are updated every 2 years. The 2025-2026 list now comprises eight *Best Practices*.

The 2025-2026 ***Targeted Medication Safety Best Practices for Community Pharmacy*** include the following three new *Best Practices*:

New *Best Practice* 6: Obtain and use a patient's weight to verify dosing of weight-based medications.

- Obtain and document the patient's weight in metric units (i.e., kg or g) when dispensing weight-based drugs, such as those used in chemotherapy treatment, pediatric patients, or pets.
- Work with software vendors and/or information technology staff to:
  - Provide a discrete field within the pharmacy computer system to record the patient's weight in metric units.
  - Configure the pharmacy computer system to capture patient weight data when included in an electronic prescription.
  - Build clinical decision support for weight-based dose checking.
  - Enable a mechanism to support staff to identify patient weights that require updating prior to dispensing weight-based medications.
  - Provide a notification when a weight entry changes significantly from the previous entry.

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Different strengths printed on cartons of temozolomide. Cartons containing bottles of temozolomide 250 mg capsules from Amneal Pharmaceuticals may have two different dosage strengths printed on the carton. A pharmacy reported they recently dispensed a carton of temozolomide 250 mg capsules to a patient. The carton contains a bottle with five capsules. Once the patient received the medication, they contacted the pharmacy to report an error on the carton label. The primary display panel listed the dosage strength as 250 mg, but the side panel listed "Each capsule contains 180 mg temozolomide, USP" (**Figure 1**). Temozolomide 250 mg was printed on the bottle inside the carton. The reporting pharmacy has identified two lots (BJ01124A, BJ01224A) affected by this issue.

Figure 1. A carton of temozolomide capsules from Amneal Pharmaceuticals. The primary display panel lists the dosage strength as 250 mg, but the side panel indicates that each capsule contains 180 mg.

We have shared this report with both the manufacturer and US Food and Drug Administration (FDA). We are waiting for additional information and guidance from

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- Establish a policy and process to ensure staff utilize a patient's weight to verify dosing before filling prescriptions for weight-based medications.

New *Best Practice* 7: Maximize the use of technology to prevent errors during the return-to-stock (RTS) process.

- Do not return medications from filled prescriptions into manufacturer stock bottles that have been opened or cells within automated dispensing technology.
- Create functionality within the pharmacy computer system to generate specific labels to apply to prescription bottles that require RTS.
- RTS labels should include the drug name, dosage strength, expiration date, description (e.g., tablet shape, color, imprint code), and a barcode that can be used when filling a subsequent prescription.
- Place RTS medications (after affixing an RTS label) on pharmacy shelves and, as appropriate, use these to fill subsequent prescriptions.
- Develop functionality to automate and guide the use of available RTS medications to fill prescriptions before reverting to sending prescriptions to an automated dispensing system for filling.
- Utilize barcode verification throughout the RTS process to ensure the correct RTS label is placed on the correct RTS prescription and during subsequent prescription fills.
- Periodically review and observe the RTS process to ensure adherence.

New *Best Practice* 8: Establish standard processes to prevent errors during vaccine preparation and administration.

- Schedule dedicated resources and times for vaccinations.
- Verify a patient's immunization status prior to administering vaccines (in the vaccine registry and the patient's pharmacy record as available).
- Obtain and review the patient's completed vaccine administration consent and screening form prior to administration.
- Provide patients and/or caregivers with written vaccine information in their primary language prior to vaccination (e.g., vaccine information statement [VIS]).
- Provide verbal counseling and an opportunity for the patient/caregiver to ask questions.
- Store vaccines separately based on the type and formulation (e.g., pediatric and adult formulations of the same vaccine). Store two-component vaccines together if storage requirements do not differ.
- Use prefilled syringes when available. If not available, prepare each vaccine dose immediately prior to administration and label with the vaccine name, dose, and if appropriate, the indicated age range.
- Verify the vaccine expiration date prior to administration.

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the manufacturer. For now, carefully inspect the temozolomide products from Amneal that you have in stock. Sequester and do not use any cartons that have this labeling error and contact the manufacturer. The pharmacy that reported this has decided to order the medication from a different manufacturer for the time being.

More prescription bags given to the wrong patients. Just in the last few weeks, we have received more reports of patients being given a prescription bag intended for a different patient. In the first case, two patients were prescribed progesterone 100 mg. One prescription was placed in a bag labeled #52 and the other in a bag labeled #152. When one of the patients arrived to pick up their prescription, they were given the bag for the other patient. The patient did not realize a mistake was made since it was the exact medication they were expecting. The error was found when the other patient came in to pick up their prescription. The reporter indicated that the pharmacy staff person was distracted and did not follow the established process.

In the second case, the pharmacy cashier handed the wrong bag to the patient after completing the transaction. The error was recognized by the cashier as the patient was driving away from the pharmacy. The patient was contacted, returned to the pharmacy, and the error was corrected. In this case, the reporter indicated that the workstation was cluttered and that the cashier did not verify the patient's identity before handing the bag to them.

Keep workstations neat and free of clutter. In addition to always verifying the patient's identity by asking for at least two identifiers, one of the most effective ways to prevent this error is to open the bag of filled prescriptions at the point-of-sale and verify with the patient that the medications are correct and for the right patient. Talking with the patient about their medications can further reduce the risk of errors. See *Best Practice 1* in the 2025-2026 ***ISMP Targeted Medication Safety Best Practices for Community Pharmacy***.

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- Document the vaccine's national drug code (NDC), lot number, and expiration date prior to administration; document administration, including the administration site, and ensure information is sent to the local or state vaccine registry *after* vaccine administration.
- Provide a separate area or room for vaccine administration, away from distractions and interruptions.
- If multiple patients (e.g., in the same family) are being vaccinated at the same time, bring one patient into the vaccination area at a time; or at a minimum, bring only one patient's vaccines into the vaccination area at a time.
- Verify the patient's identity using at least two unique identifiers (e.g., full name, date of birth, address).
- Use open-ended questions to ask the patient/caregiver what vaccine they are expecting to receive and verify that this information matches the vaccine in hand to be administered.
- Use barcode scanning technology to verify the correct vaccine(s), dose(s), and diluent(s) are selected and are being administered to the correct patient.
- After administering the vaccine, monitor the patient for the indicated period as applicable. Establish a documented plan to respond to vaccine related reactions.
- Provide vaccinators with dedicated time to allow for ongoing education about vaccines including appropriate storage, selection, administration, and monitoring.
- Provide regular competency assessments for all staff who prepare and administer vaccinations.

Conclusion

Community pharmacies should focus their medication safety efforts over the next 2 years on these new *Best Practices* and any *Best Practices* that have not yet been fully implemented. The rationale for recommending the *Best Practices*, along with related ISMP publications for additional information, can be found in the full document. An Implementation Worksheet is also available to help community pharmacies identify gaps in the implementation of these *Best Practices* and develop an action plan to address vulnerabilities.

Nilotinib formulations–Danziten and Tasigna–are not interchangeable

Problem: On November 14, 2024, Azurity announced the approval of **DANZITEN** (nilotinib) indicated for adults with newly diagnosed Philadelphia chromosome positive chronic myeloid leukemia (Ph+ CML) in the chronic phase (CP) and adults with CP and accelerated phase (AP) Ph+ CML resistant to or intolerant to prior therapy that included imatinib. Danziten is available in blister packs containing 71 mg or 95 mg tablets, which must be swallowed whole (i.e., not split, crushed, chewed), and may be taken with or without food.

TASIGNA (nilotinib), manufactured by Novartis, is approved for the same indications as Danziten but for both adult *and* pediatric patients 1 year of age and older. Tasigna is available in different strengths—bottles containing 50 mg capsules or blister packs containing 150 mg or 200 mg capsules—and a different formulation than Danziten. Due to Tasigna's increased bioavailability

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Patient readmitted to hospital after mix-up between bumetanide and budesonide. A patient with congestive heart failure was hospitalized for fluid overload. A medical resident intended to discharge the patient with a prescription for the diuretic bumetanide 6 mg (requiring the patient to take 3 of the 2 mg oral tablets) once a day. When the resident entered the prescription in the electronic health record (EHR), the screen allowed him to search for the medication name using only two letters. He inadvertently selected and prescribed budesonide 6 mg (requiring the patient to take 2 of the 3 mg delayed-release capsules) orally once a day. Budesonide is a corticosteroid. The prescription did not include an indication, and the outpatient pharmacy dispensed budesonide. The patient took the incorrect medication for five weeks before they were readmitted to the hospital for fluid overload, and the error was discovered.

Software systems vendors should develop and implement an algorithm that allows users to enter the exact number of characters to get only one unique drug name to appear on the screen when searching for medication names. If a dynamic search function is not available, consider requiring entry of a minimum of the first five letters of the drug name. Prescribers should include the purpose of the drug on prescriptions to help inform the pharmacist of the patient's condition and ensure the correct medication is selected. Pharmacists should review the prescription label with the patient, confirm the indication, and ensure it is the medication they expect.

MetFORMIN and methocarbamol bottles look alike. A pharmacy had ordered two bottles of methocarbamol 750 mg tablets. When the order arrived, they discovered that the warehouse had sent them one bottle of methocarbamol 750 mg tablets and one bottle of met**FORMIN** extended-release 750 mg tablets. Both medications are manufactured by Granules Pharmaceuticals, and the container labels make the bottles look very similar (**Figure 1**, page 4). The company uses the same color bands at the top and bottom of the labels. The blue color patterns for the dosage strength background increases the look-alike similarities. Thankfully, this error

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when taken with food, it has a *boxed warning* to avoid food 2 hours before and 1 hour after taking the medication, or it may significantly prolong the QT interval. However, according to the Tasigna prescribing information, the capsules may be opened and dispersed in one teaspoon of applesauce. Both products have a *boxed warning* for QT prolongation and sudden death with specific monitoring recommendations and the need to avoid additional QT prolonging agents or strong CYP3A4 inhibitors.

It is critical to note that these products are not interchangeable and have very different dosing recommendations (**Table 1**). Because of this, there is a risk of under or overdose and patient harm if the wrong product is selected for the ordered dosing regimen. The risk of a selection error may be increased if practitioners order the drug only by the generic name. For example, if the prescribed nilotinib dose is 300 mg every 12 hours by mouth, there may be some who think they can use three of the Danziten 95 mg tablets, round the dosage strength, and get close enough to the prescribed 300 mg dose. This would result in an overdose of Danziten.

Table 1. Recommended adult dosing for Danziten and Tasigna.

Approved indications for adults	Danziten dosage (with or without food) *	Tasigna dosage (on an empty stomach) *
Newly diagnosed Ph+ CML-CP	142 mg every 12 hours	300 mg every 12 hours
Resistant or intolerant Ph+ CML-CP and CML-AP	190 mg every 12 hours	400 mg every 12 hours

* Doses may be modified or reduced based on organ function, cardiac monitoring, laboratory values, or concomitant medications.

Safe Practice Recommendations: ISMP has notified the US Food and Drug Administration (FDA) of this concern and recommends that drug information vendors and electronic health record (EHR) vendors clearly differentiate these products and ensure they are not interchangeable in electronic systems. Medical offices, clinics, and pharmacies should evaluate how these drugs appear in their electronic systems, and if possible, only allow them to be ordered by brand name, or use both generic and brand names. Build clinical decision support with dose range checking and warnings (e.g., avoid food 2 hours before and 1 hour after administering Tasigna). In the EHR, create order sentences that automatically link to the appropriate dosing formulation. Store these products separately and use barcode scanning when receiving and dispensing. Educate staff and patients that these products are not interchangeable, and to confirm it is the correct brand name prior to dispensing and administration. During patient education, reinforce the specific brand the patient is taking, whether it should be taken with or without regard to food, and the correct dosing instructions, especially if the patient is directed to take a reduced or alternate dose than what is included in the blister pack.

Special Announcement

Virtual MSI workshop

Join us for our first ***ISMP Medication Safety Intensive (MSI)*** workshops in 2025. The two-day virtual workshop is designed to help you successfully address current medication safety challenges that impact patient safety. Program faculty will provide you with the knowledge, as well as specific tools and resources needed to establish and sustain a medication safety program.

A virtual program for **acute care settings** will be held **March 13 and 14, 2025**. A virtual program for **community, mail order, and specialty pharmacies** will be held **April 25 and May 2, 2025**. For more information and to register, please click here.

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was caught before the bottles were placed on the pharmacy shelf, where a selection error could have occurred. The pharmacy contacted the warehouse to notify them of the error and to advise them not to store these two medications near one another.

Figure 1. Look-alike bottles of methocarbamol, and met**FORMIN** from Granules Pharmaceuticals.

One strategy to prevent mix-ups is to purchase products from different manufacturers to reduce the number of look-alike containers. If you currently have these products, consider storing them separately; make sure staff are aware that they have been separated and where to locate the medications. Pharmacies should utilize barcode scanning during dispensing and verification, scanning each bottle used to fill a prescription. We have notified the manufacturer of this look-alike issue.

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