

# Acute Care

# ISMP Medication Safety Alert!®

Educating the Healthcare Community About Safe Medication Practices

## Fixing the cracks—Good catch programs strengthen the foundation



**PROBLEM:** Imagine a building with hairline fractures in its foundation. These cracks, though seemingly insignificant, represent underlying weaknesses that, if ignored, can lead to significant structural problems. If a building inspector overlooks a minor fracture, the underlying issue can worsen, leading to a major structural failure. Similarly, in healthcare, medication errors caught before they reach the patient can serve as the same warning signs. The problem? Often, these close calls (i.e., near misses, good catches) that do not reach the patient go unreported, just like those ignored cracks. Why the silence? Perhaps a “no harm, no foul” mindset exists, the reporting system is cumbersome, fear of repercussions looms, or the perception exists that leadership does not value these insights. This underreporting prevents us from learning from these close calls and reinforcing our systems, and may increase the risk of actual errors, patient harm, or death.

### Reasons Close Calls May Go Unreported

Several factors can hinder the reporting process in a hospital setting. First, some practitioners may think that since the error did not reach the patient, it is not worth reporting and the practitioners will quickly move on to their next task. Some may think that correcting an error is just a routine part of their job.

Second, a lack of clear reporting channels and procedures can deter staff. The question becomes, “To whom should this information go? Is there a straightforward process?” This is akin to not knowing who to call when you spot a crack; is it the landlord, the building manager, or someone else? A lack of understanding about what constitutes a reportable close call or the proper method for documentation can contribute to underreporting. Given demanding workloads and staffing challenges, the prospect of completing yet another report can feel burdensome.

Third, fear of repercussions can significantly discourage transparency. Understandably, individuals may hesitate to highlight potential problems if they fear punitive action. Nobody wants to be blamed for the cracks, even if they were only the ones who noticed them!

Finally, if leadership does not actively foster a culture of safety, the perception may arise that leadership does not value the reports, like leadership dismissing the cracks with a casual “They’re fine, don’t worry about it.”

### Good Catches Reported to ISMP

In our September 19, 2024 article, Pharmacy Technician's Good Catch Via Scanning Prevented Wrong Drug Error, we discussed a pharmacy technician's good catch after attempting to compound a sodium phosphate infusion using an intravenous (IV) workflow management system (IVWMS). The technician removed a vial of what they thought was sodium phosphates (phosphate 45 Mmol and sodium 60 mEq per 15 mL) from the bin labeled “sodium phosphate.” When they scanned the barcode on the vial, the IVWMS fired an alert indicating the incorrect product had been scanned. This caused the technician to pause, and upon inspection of the vial, he identified that he had a 20 mL vial of 0.9% sodium chloride in his hand. Both products, made by Fresenius Kabi, come in similar-sized clear plastic vials with pink caps, have names beginning with the word “Sodium,”

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### SAFETY briefs



**Med Safety Board publishes white paper about safe use of ADC storage configurations.** In our June 2025 newsletters, we shared that Med Safety Board (MSB), an ISMP company, was surveying the safe use of automated dispensing cabinets (ADCs) regarding storage configurations, error risks, and medication access concerns. MSB has recently published a white paper, [Optimizing ADC Safety: Research Insights into Storage Configurations and Processes That Minimize Errors and Delays](#), which summarizes the survey results, along with findings from other collected data sources, including errors reported to ISMP, and provides recommendations for both healthcare organizations and ADC manufacturers/vendors.

In summary, the survey found that nearly two-thirds of respondents reported an error(s) occurring within the past year with multiaccess compartments (67%), such as matrix drawers or towers, and single-access compartments (66%), such as locked-lidded pockets. Errors can occur with both single- and multiaccess compartments. Most respondents (96%) perceived that storing medications in single-access compartments minimizes the risk of error, and 86% agree that storing medications in multiaccess compartments contributes to errors. Furthermore, practitioners also believe that they do not have enough single-access compartments (49%) compared to multiaccess compartments (22%) in ADCs within their organizations.

The most common error reported with multiaccess compartments was finding the wrong medication in a compartment intended for a different drug (43%). Reported contributing factors included storing similar medications near each other (e.g., different strengths of the same drug, look-alike packaging) or practitioners having access

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and have the same first five numbers in their NDC (63323) (**Figure 1**). The technician notified the pharmacist, who escalated the concern to pharmacy administration. The pharmacy had recently purchased the Fresenius Kabi sodium chloride vials due to a drug shortage from their typical supplier.

In our April 18, 2024 article, *Sharing a Good Catch Prevented a Future Error*, we shared a good catch when a nurse reported that after attempting to remove a vial of furosemide 20 mg/2 mL (Hospira) from an automated dispensing cabinet (ADC), they found vials of ketorolac 30 mg/mL (SOLA) mixed in the pocket with the furosemide during the ADC refilling process. Both products come in similar-sized brown, light-protected vials, with the drug names displayed in white font on orange banners near the top of the label (**Figure 2**). Due to a shortage, the pharmacy had recently purchased ketorolac from SOLA. At an interdisciplinary safety huddle, the leader shared the good catch with staff to alert them to the similar-looking vials. A few days later, when checking medications to be filled in an ADC, a pharmacist found a ketorolac vial mixed with furosemide vials. Since the nurse's good catch had been shared with the pharmacy staff, the pharmacist was aware of the risk from the look-alike vials, which helped them identify the error.

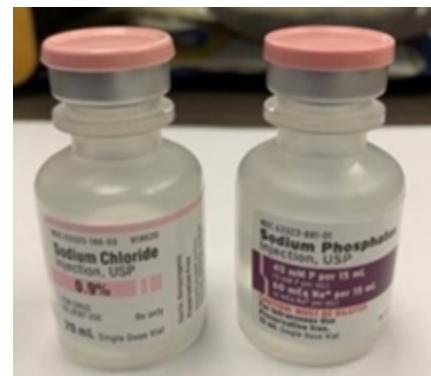
### Good Catches Are Treasured Gems

Real change in medication safety requires a strong, proactive safety culture. By actively seeking out and addressing potential problems before they escalate—like spotting and repairing those initial “cracks in the foundation”—and rewarding staff who identify these vulnerabilities, we create a system where errors become opportunities for growth. This commitment to early detection allows us to reinforce our defenses and ensure a healthcare system that is truly “built on solid ground” for our patients.

A Pennsylvania hospital tackled the critical issue of wrong-site, wrong-procedure, and wrong-patient errors by implementing a comprehensive good catch campaign in the perioperative setting. This initiative focused on building a safety culture where close calls were openly reported, fostering a proactive environment for error prevention. Key elements included targeted staff training, a simple electronic reporting system, and debriefing sessions to analyze good catches.<sup>1</sup>

The campaign's impact was substantial. In just six months, 391 potential errors were reported and addressed, demonstrating the effectiveness of encouraging open communication. Subsequent surveys revealed significant improvements in staff perceptions across key areas of safety culture, including communication, feedback, reporting, non-punitive responses to errors, and organizational learning.<sup>1</sup> These results underscore the value of the good catch campaign as a powerful strategy for enhancing patient safety in the perioperative setting and beyond.

**SAFE PRACTICE RECOMMENDATIONS:** Organizations should prioritize good catch programs to help identify and address safety concerns before they cause harm, strengthening the foundation for



**Figure 1.** Vials of sodium chloride injection (left) and sodium phosphates injection (right) are similar in size, and both have pink caps.



**Figure 2.** Similar-looking vials of furosemide (middle two vials) and ketorolac (top and bottom vials) were found mixed together.

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to multiple open bins, resulting in the user inadvertently selecting the wrong medication. Size and/or quantity of medications was often cited as the reason for storing a medication in a multiaccess compartment (71%). More than half of the respondents (53%) reported that medication storage errors led to a modification of the involved drug storage, switching to single-access compartments instead of multiaccess compartments.

Respondents shared that they had single-access storage for controlled substances (94%), high-alert medications (84%), medications that have been involved in errors (64%), and medications with look-alike names (62%) or look-alike labeling/packaging (55%). The most common type of error reported with single-access compartments was wrong drug storage due to a stocking error (46%). One reported contributing factor included not scanning individual barcodes when restocking the medication in the ADC.

Refer to the white paper for additional details, including the impact of ADC malfunctions. Review the recommendations provided in the white paper to optimize safe ADC storage, minimize errors, and limit access concerns from ADC malfunctions. Thank you to all practitioners (N = 156) who participated in this survey enabling us to learn more about the safe use of ADCs.



**Wasted medication in unlabeled cup mistaken as water.** A prescriber told a nurse to discontinue a patient's fentaNYL infusion (2,500 mcg/250 mL). After disconnecting the infusion, the nurse poured the remaining 100 mL volume into a graduated cup to measure and document the waste of the controlled substance. The nurse set down the unlabeled cup in the patient's room and left to initiate the waste documentation. A nurse orientee entered the room to administer other scheduled medications via the patient's percutaneous endoscopic gastrostomy (PEG) tube. Thinking the graduated cup left at the bedside contained water, the nurse in training withdrew 40 mL from the unlabeled cup and used it to flush the

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everyone involved in patient care. Consider the following recommendations when implementing a good catch program.

**Create a policy.** A well-defined policy is the cornerstone of any successful program. The policy should clearly define what constitutes a good catch, emphasize the importance of reporting, and outline how leadership will analyze good catches to identify trends and implement system-wide changes, promoting transparency and building trust among staff.

**Make it easy to report.** Reporting mechanisms should be exceedingly easy, readily accessible, and require minimal training. Instead of asking the reporter broad, general questions, the report should prompt for key identifying information and a free-text description of the event.

**Encourage staff to speak up.** Bringing positive attention to those who report potential safety concerns sends a powerful message about the organization's culture of safety. One approach is to share good catches during huddles or staff meetings. Share what situation occurred and how it was caught, highlighting the learning points for others, to foster a culture of shared knowledge.

**Provide recognition.** For particularly impactful good catches, consider offering the individual a small token of appreciation. A small gift card to a local coffee shop or movie theater can go a long way. Even better, feature their story in the hospital newsletter or on the hospital's internal communication platform, sharing the lessons learned with a wider audience. Some organizations provide staff with a traveling trophy or offer a meet and greet with executive leadership. Gather feedback from staff to determine what motivates them and makes them feel most appreciated.

**Detect errors through other means.** To generate a more complete picture of the safety of the medication-use process, organizations must collect and analyze data beyond that gathered through voluntary error reporting. Include errors detected and/or averted by automation (e.g., barcode scanning data, smart pump data, alerts generated in order entry and verification systems). While time consuming, you can learn a lot about process variation through observational studies of critical or complex parts of the process (e.g., pharmacy compounding, medication administration). Staff are often very willing to suggest at what points in the process they are feeling vulnerable; all you have to do is ask.

**Educate practitioners.** Incorporate training about the good catch program into orientation and annual competency assessments. Education should include clear instructions on how to report close calls through the organization's reporting system, along with real-life examples of good catches and their positive impact on patient safety. Explain that reports do not go "into a black hole" but follow a structured review pathway, including by leadership and interdisciplinary groups. Consider creating easily accessible resources, such as posters and infographics, outlining the steps for reporting and the benefits of participation.

**Report close calls and errors.** Encourage staff to report close calls and errors not only to the organization's internal system but to [ISMP](#) as well.

**Learn and improve.** Establish a regular forum, such as safety huddles and/or a dedicated section in the departmental or organizational newsletter, to share impactful good catch stories and the resulting system improvements. This demonstrates the value of reporting and encourages continued participation in the program. The goal is to enhance awareness about how fixing those little "cracks" can prevent bigger issues down the road, ultimately creating a safer environment for patients and staff alike.

## Reference

- 1) Lozito M, Whiteman K, Swanson-Bearman B, Barkhymer M, Stephens K. Good catch campaign: improving the perioperative culture of safety. *AORN J.* 2018;107(6):705-14.

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patient's PEG tube after administering the enteral medications. When the patient's nurse returned and saw that approximately 60 mL of the fentaNYL remained in the cup, they realized what probably happened and confirmed with the orientee that about 40 mL of the fentaNYL waste was used to flush the PEG tube. The patient's blood pressure decreased, and the nurse notified the prescriber that the patient had received 400 mcg of fentaNYL via their PEG tube. As ordered by the prescriber, the nurse attached the patient's PEG tube to suction, and administered naloxone, after which the patient's blood pressure improved.

Waste measurement, documentation, and disposal of controlled substances should occur right away at the site of disposal, with a witness present to ensure chain of custody verification. While recording controlled substance waste is a crucial step in avoiding diversion and complying with local, state, and federal regulations, organizations must determine the safest mechanism for doing so, then ensure that this process is hardwired across the board. Additionally, healthcare-related errors involving unlabeled containers rank high as a cause of patient harm. Always label everything, everywhere, whenever it may leave your hand, even if the medication is to be given immediately. It only takes a second for the wrong medication or chemical to be given to a patient. Never leave a medication, including wasted medications, unattended, where patients or visitors could inadvertently consume them, or other practitioners could use them.

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**Editors:** Shannon Bertagnoli, PharmD; Ann Shastay, MSN, RN, AOCN; Rita K. Jew, PharmD, MBA, BCPPS, FASHP; Editor Emeritus, Michael R. Cohen, RPh, MS, ScD (hon), DPS (hon), FASHP. ISMP, 3959 Welsh Road, #364, Willow Grove, PA 19090. Email: [ismpinfo@ismp.org](mailto:ismpinfo@ismp.org); Tel: 215-947-7797.



# SHARING A SAFETY MISSION

ISMP 28<sup>TH</sup> ANNUAL CHEERS AWARDS

**Tuesday, December 9, 2025**

**House of Blues – Las Vegas, NV 6:00 pm**



**The Michael R. Cohen Lifetime Achievement Award Winner:**

**Martin J. Hatlie, JD**

Founding Member, Director for Policy & Advocacy, Patients For Patient Safety US

The 28th Annual ISMP Cheers Awards will celebrate individuals and organizations on a mission to make strides in medication safety. Support ISMP's ONLY annual fundraising event or attend the awards dinner to honor them and advance our shared goal of preventing errors and protecting patients!

**For support opportunities and/or to register for the dinner, visit: <https://home.ecri.org/pages/cheers-event>**

## **ISMP will be at the 2025 ASHP Midyear Clinical Meeting Educational Sessions with ISMP Speakers:**

**Sunday, December 7, 2025**

**How Smart Are Smart Infusion Pumps in Preventing Medication Errors?**

9:00 am – 10:15 am PT

**ISMP Medication Safety Update 2025**

3:30 pm – 5:00 pm PT

**Tuesday, December 9, 2025**

**A Winning Strategy: Confronting the Top 10 Patient Safety Challenges of 2025 with ISMP**

10:00 am – 11:00 am PT

**Symposium: Safety Considerations for IV Push Amid Drug Shortages**

11:30 am – 1:00 pm PT

Mandalay Bay Convention Center - South Pacific D - Lower Level  
Preregister here: <https://home.ecri.org/blogs/ismp-upcoming-events/safe-iv-push-practices-amid-drug-shortages>